

1630455241 - St. Clair
East St. Louis/Fox Solar's Awning
Superfund/Technical Reports

**Lead Contamination Delineation Report and Removal Action Work Plan
East Saint Louis Awning, Site 160
LPC # 1630455241**

Prepared for:

**Illinois Environmental Protection Agency
Bureau of Land
Remedial Project Management Section
1021 North Grand Avenue East
Springfield, Illinois 62794-9276**

Prepared by:

**Bodine Environmental Services, Inc.
5350 East Firehouse Road
Decatur, Illinois 62521
1-800-637-2379**

**September 2002
BES Project #112025**

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US EPA RECORDS CENTER REGION 5



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1.0 Site History and Background

The United States Environmental Protection Agency (U.S. EPA) Region V established a geographic initiative to look at regional environmental issues in the East St. Louis Area. This initiative was started in 1992 in an effort to review the work being performed in the area by State and Local Agencies and to evaluate ways that they could bring additional Federal Resources to the area to address environmental issues.

One of the most significant issues that resulted from this initiative was the discovery that one out of every four school age children, ages 5-12, were shown to have elevated blood lead levels. Elevated lead levels were found in paint on and surrounding residential structures and in residential and industrial soils.

In February of 1999, the U.S. EPA Region V met with all the local and state agencies that had a stake in the East St. Louis lead issue and the East St. Louis Lead Collaborative was formed. In 2001 it was decided to change the name of the group to the Metro East Lead Collaborative to illustrate the shift from focusing exclusively on East St. Louis to focusing on East St. Louis, Washington Park and other surrounding communities that are addressing similar lead issues (see list of Metro East Lead Collaborative Stakeholders in Appendix A.).

In the spring of 1999, two simultaneous actions took place in East St. Louis. The first action consisted of performing Phase I Environmental Site Assessments on 20 Industrial Properties within East St. Louis to investigate the possibility of elevated levels of lead in soil of former industrial sites and surrounding residential properties (see list of properties in Appendix A). The second action consisted of the blood lead level sampling of school age children in numerous East St. Middle Schools. This activity was performed by St. Mary's Hospital in cooperation with several local Health Departments.

In February of 2002, the U.S. EPA Region V, requested that the Illinois EPA perform further site assessment and elevated lead in soil removal on two of the 20 properties identified as possible cleanup candidates (see U.S. EPA Letter dated February 14, 2002 in Appendix A). These sites are Adept Tool and East St. Louis Awning.

The East Saint Louis Awning Company was located on the northeast corner of the intersection of Ridge Avenue and Gray Boulevard prior to 1958. The address was listed as 1901 Ridge Avenue, East Saint Louis, Illinois. Background information suggest the facility manufactured metal awnings and other ornamental metal fabrications on the approximately 02. acre parcel. Currently a two-story brick building covers the majority of the property with a small area of grass at the west end of the building and along Ridge Avenue. According to previous documents, the property is currently used for residential purposes with several apartments.

Another facility in the area was Gateway Paint Manufacturing Company (Gateway). The address of this facility was listed as 1925 Ridge Avenue, East Saint Louis, Illinois. Gateway is assumed to have been located in the abandoned facility on the northwest corner of Trendley Avenue and Wimmer Street, just East of the East Saint Louis Awning Company. It has been reported that the current owner was not aware of such past use and reported the facility to be used for dairy processing and tractor truck parking/storage. Gateway is approximately 1.0 acre paved facility with two large deteriorated buildings. Evidence of illegal dumping was observed throughout the site.

Residential land use is the dominant land use around the facilities, with commercial uses along State Street to the North. Several multi-family dwellings were observed and several homes beyond repair were scheduled for demolition by the city.

Previous documents, generated under the direction of U.S. EPA Region V, have labeled this site as Site 160 and Site L.

2.0 Executive Summary

Under a contract amendment to the Illinois Environmental Protection Agency Corrective Action Contractual Services Agreement #HWA-9305, Bodine Environmental Services, Inc. (Bodine) was tasked to prepare a Delineation Sampling Plan, Delineation Field Effort, Project Summary, Scope of Work for Removal, Cost Estimate for Removal, Work Plan for Removal and Health and Safety Plan for removal of lead contaminated soils. This document combines all of the project deliverables into one document, *Lead Contamination Delineation Report and Removal Action Work Plan, East Saint Louis Awning, Site 160*.

Bodine conducted a site visit and discussed various approaches with Illinois Environmental Protection Agency (Illinois EPA) representatives at which time a delineation investigation utilizing Bodine staff, Illinois EPA staff and Illinois EPA XRF equipment seemed to provide the most efficient use of limited resources. Bodine obtained aerial photographs with property boundaries and tax parcel identification numbers from Illinois EPA representatives along with a list of names and addresses corresponding to the tax parcel identification numbers. Bodine developed a CADD map utilizing the above information and overlaid a spatially weighted sampling grid as part of the systematic planning process identified in the U.S. EPA guidance document "Data Quality Objectives for Superfund."

After finalizing the grid size and application, the delineation sampling was conducted on May 20 through 23, 2002. Based upon review of the data points, over 1300 separate data points were collected, analyzed, reported and evaluated as part of this four-day field effort. Samples results were grouped into three primary categories: <400 parts per million (ppm) of lead, 400 ppm to 1,000 ppm of lead; and, > 1,000 ppm of lead. These categories were established based upon the 400 ppm of lead in soil Residential Cleanup Objective established under the Tiered Approach to Corrective Action Objectives (TACO) and the Illinois Department of Public Health Lead Based Paint Cleanup Objective of 1,000 ppm of lead in soil. It should also be mentioned the U.S. Housing and Urban Development Residential Cleanup Objective is 2,000 ppm of lead in the soil.

Utilizing the systematic field screening approach generated sufficient data points for each parcel to allow the use of a statistical evaluation of the measured concentrations by Illinois EPA toxicologists. As a result of the statistical evaluation, nineteen parcels with concentrations of lead in the soil reported at greater than 400 ppm were determined to be below the human health risk threshold when evaluated in a data set containing the other sample results from that parcel. Significant resources have been conserved through the utilization of the delineation sample effort, systematic sampling approach and the statistical evaluation of the data sets.

Based upon the consultation with Illinois EPA representatives, Bodine prepared CADD Maps identifying the sample results in the categories of 400 ppm to 1,000 ppm of lead in the soil and greater than 1,000 ppm of lead in the soil. These figures were then utilized to estimate the locations, area and volume of contaminated soil for removal. Estimates were prepared assuming an eighteen (18) inch excavation depth to provide a cost estimate for Illinois EPA.

3.0 Contamination Delineation Investigation

An initial site visit was conducted to discuss project objectives with Illinois EPA representatives, obtain historical information about the areas, assess the condition of the properties, assess accessibility of the properties and finalize the overall project goals. During the initial site visit, Illinois EPA indicated availability of the XRF Field Screening device. As a result, Bodine presented options taking advantage of the availability of the XRF and associated Illinois EPA personnel. After the initial discussions, Illinois EPA determined the field screening effort, as part of the Work Plan development, provided the most technically defensible and cost efficient manner to prepare the cost estimate for the removal action.

Illinois EPA provided background information, aerial photograph/tax records from the tax assessor's office, obtained access from properties owners and prepared fact sheets for the Contamination Delineation Investigation. Bodine completed an evaluation of the data and prepared a list of tax parcel numbers with corresponding names, street addresses, data access obtained and notes for use by Illinois EPA representatives to obtain access agreements. Following the assessment of the scope of the investigation, Bodine utilized the information provided by Illinois EPA to develop a Computer Aided Drafting Document (CADD) map, see Appendix B. A site-specific evaluation was conducted by Bodine using the "Data Quality Objectives Process for Superfund," U.S. EPA, 1993 as a reference.

State the Problem

Elevated blood lead levels in children were identified as a geographical health problem in the Metro East Saint Louis Area. Supplemental investigations identified elevated lead concentrations in surface soils associated with this facility. A removal action is planned and an accurate cost estimate needs to be prepared.

Identify the Decision Rule

Determine areas exceeding the Illinois EPA, 35 Illinois Administrative Code (IAC) 742, Tiered Approach to Corrective Action Objectives (TACO), Tier I Residential Soil Remediation Objectives.

Identify the Inputs to the Decision

1. Concentration of Lead in the surface soils.
2. Measure concentration using an XRF.
3. Action levels are established by TACO at 400 ppm, Illinois Department of Public Health at 1,000 ppm and U.S. Housing and Urban Development at 1,200 ppm.

Define the Boundaries of the Study

Spatial

1. The boundaries of the study are established by the Illinois EPA based upon previous data collected by the USEPA, tax assessor records and property owner's permission.
2. The surface soils (0-6 inches).
3. Grids must be established to spatial cover the areas and include sufficient data points for statistical evaluation of properties based upon ownership.

Temporal

1. The removal action is planned to occur in the earlier to late fall of 2002; therefore, the cost estimate needs to be completed by July 2002.
2. Using XRF as a field screening tool for lead does not represent holding time problems because lead is stable in soil.
3. Access issues represent the most significant limitation of the study.

Develop a Decision Rule

1. If lead contamination is equal to or greater than 400 ppm, then the parcel requires further evaluation to determine if the potential exposure from that property represents a risk to human health.
2. If one or more surface soil samples in an individual parcel exceeded a concentration 650 ppm of lead then the parcel was not subjected to a statistical evaluation. The parcel was included in the recommendation for removal action.

Specify Limits on the Decision Errors

1. The possible range of lead contamination in surface soils is estimated to be between 11 ppm and 3,500 ppm.
2. Laboratory analysis of duplicate surface soil samples will be conducted to determine the empirical relationship between the XRF data and fixed laboratory or definitive results.
3. Spatial review of structures, driveways and other site related features prohibiting collection of surface soil samples resulted in the establishment of 10 feet by 20 feet grids oriented with each property, from the tax assessors' aerial photograph.
4. A bias for false positives is accepted.

Optimize the Design

1. The proposed sampling grid for the site is included in Appendix B. This figure represents the optimized sample collection design.
2. Site-specific adjustments to the sampling grid may be required in the field as a result of unobserved site features, access restrictions, inability to obtain owner permission and availability of homeowners to unlock fences and gates.

4.0 Data Collection

On May 21, 2002, the Field Sampling Team (FST) arrived on site. A brief site safety meeting was conducted. Locations and parcels were confirmed with Illinois EPA representatives and the process of laying out grid lines and marking sampling locations was initiated.

Sample grids were established using pre-measured and marked ropes. The ropes were marked in 10 feet and 20 feet increments, consistent with the established grids. Property lines were established in the field using the maps, aerial photographs, foundations, driveways, site utilities and fences. As the grid was established for each property or parcel, marking paint was applied to the surface soil at the location where a sample was to be collected. The grids were labeled using a combination of letters and numbers to insure the sample points would be correctly identified.

Following the marking of sampling locations, two FST members utilized pre-made Field Data Sheets, see Appendix E, for specific parcels. At each of the sample locations, the sample team removed the organic matter from the surface and collected a soil sample from the 0-6 inch interval. The soil was placed into a PTFE baggy and the grid identification letter and number were placed on the bag. After collection of all of the samples for a specific parcel, the individual bags were placed into a larger PTFE bag that included the field data collection sheet with the corresponding parcel number and address.

Each of the parcel specific bags was then transferred to the Illinois EPA representative using the XRF. Each sample collected was analyzed using the XRF and the corresponding concentration was recorded on the Field Data Sheet. Throughout the analysis process, Illinois EPA recorded the continuing calibration standard results on the Field Data Sheets.

After the field screening, samples with concentrations of lead in the soil close to the Action Level were submitted for fixed laboratory analysis by the Illinois EPA Division of Laboratories. The laboratory reports are contained in Appendix D. *An evaluation of the fixed laboratory reported results and the XRF reported results was conducted to assess the correlation between the data sets.* While some correlation may be established for higher concentrations, there are confounding data points that can't be explained. Rather than attempting to make the data fit acceptable parameters, an assessment of the delineation investigation XRF data versus fixed laboratory data will be included in the Work Plan for the removal action.

Any parcel-specific adjustment of the initial grid sampling was confirmed with the Illinois EPA representative and documented in the figure's corresponding to the parcel locations. Reasons for adjustment of sampling grids included: chained or fenced dogs, trees, shrubs, fencing, refuse piles, concrete and failure to secure access to properties.

Field sampling activities were completed by the end of May 23, 2002. Illinois EPA continued to conduct the XRF analysis of the samples collected during the field-sampling event. Illinois EPA representatives completed the XRF analysis by June 6, 2002. Completed Field Data Sheets were forwarded to Bodine for evaluation and compilation.

Following the collection of the samples, a composite sample was collected from the areas to be representative of the waste to be removed. The equal sample volumes from each aliquot were placed into a decontaminated stainless steel pan. The soil was mixed thoroughly and placed into two 9-ounce glass jars for waste profile analysis (Illinois EPA Greener Sheet). During the Removal Action, the waste will be profiled to Milam Landfill as a special waste, based upon the laboratory report is contained in Appendix D.

5.0 Data Evaluation and Recommendations

Illinois EPA representatives and Bodine reviewed the Field Data Sheets. Based upon consultation with Illinois EPA Toxicity Assessment Unit, a statistical evaluation of each parcel containing reported concentrations of Lead greater than or equal to 400 ppm, but less than 1,000 ppm was conducted. The tables and results are contained in Appendix C.

After all of the Field Data Sheets were collected, an independent internal review was conducted by Bodine to prioritize the data entry onto the CADD figures. Any field changes to the sampling grids were revised into the CADD figures and each grid where a sample was collected was coded based upon the reported concentration. Concentrations of lead in surface soil greater than or equal to 400 ppm, but less than 1,000 ppm were indicated with a green open circle. Sample locations with concentrations of lead in the surface soil exceeding 1,000 ppm were indicated with a red full circle. This technique was used to allow black and white photocopies to retain accurate identification of the locations exceeding the action levels.

The Field Data Sheets were organized into three categories:

No Further Action Required No concentration of lead in surface soil \geq 400 ppm.

Statistically Eliminated Concentrations \geq 400 ppm and $<$ 650 ppm but the average exposure, using the statistical methods, did not exceed the Action Level.

Removal Recommended Concentrations \geq 400 ppm and the average exposure, using the statistical methods, exceeded the Action Level. Parcels with reported concentrations of lead in surface soils $>$ 650 ppm was recommended for further action without supporting statistical analysis.

Each parcel that was Statistically Eliminated was labeled on the CADD figures. Each parcel in the category Removal Recommended contains a blue polygon outlining the area to be excavated. The area to be excavated was developed by reviewing the data points surrounding the locations exceeding the Action Level and interpolating the excavation boundary to incorporate locations that were close to the Action Level and represent a high likelihood contamination may extend beyond the sample location in some direction.

Based upon the results of the delineation investigation and recommendations, Bodine has proposed the removal of the top eighteen inches of soil for the areas highlighted in blue on the CADD figures in Appendix B. Utilizing the options available in the CADD program, Bodine calculated the approximate volume, in cubic yards, associated with each area recommended for removal. A general estimate, to one significant digit, is 2,000 cubic yards of lead contaminated soils

6.0 Removal Action Implementation

Bodine has conducted an evaluation of the recommended removal action. In response, Bodine has proposed the following Scope of Work:

1. Site Visit/Planning Meeting

- a. Meet with Illinois EPA representatives to finalize plans and haul routes;
- b. Conduct joint meeting for JULIE to identify and confirm utility marking boundaries; and,
- c. Meet with community officials, as requested by Illinois EPA.

2. Mobilization

- a. Finalization of Removal Action documents and Site Health and Safety Plan; and,
- b. Transportation of Personnel, Equipment and Materials to Site.

3. Site Preparations

- a. Marking excavation boundaries;
- b. JULIE markings confirmed/established;
- c. Coordination of excavation activities with residents;
- d. Fence removal; and,
- e. Clearing and grubbing.

4. Removal of Lead Contaminated Soils

- a. Excavation of proposed volumes;
- b. Confirmation sampling with XRF;
- c. Fixed laboratory analysis;
- d. Manifest and Transport Special Waste to permitted disposal facility; and,
- e. Disposal of Special Waste.

5. Backfill Excavations/Site Restoration

- a. Obtain backfill material;
- b. Transportation of backfill materials;
- c. Placement of backfill;
- d. Grading, seeding and strawing of backfill;
- e. Fence replacement; and,
- f. Shrub/tree replacement as needed.

6. Demobilization

- a. Confirmation with property owners that restoration is complete;
- b. Walk through and inspection of Removal Areas;
- c. Equipment decontamination;
- d. Transportation of equipment; and,
- e. Demobilize personnel.

7. Removal Action Completion Report

- a. Draft Removal Action Completion Report;
- b. Illinois EPA Review of Completion Report;
- c. Incorporate Illinois EPA changes; and,
- d. Issue Final Removal Action Completion Report.

8. Project Management

- a. Coordination of Mobilization/Demobilization;
- b. Weekly updates to Illinois EPA Project Manager;
- c. Documentation and field notes;
- d. Documentation of field changes;
- e. Photographic documentation;
- f. Record keeping (manifests, correspondence, facsimiles, etc.); and,
- g. Final Inspections.

Based upon this Scope of Work, Bodine has prepared a Cost Estimate, submitted under separate cover, for completing each of these tasks. The following assumptions were utilized:

1. The removal of contaminated soils and site restoration will not exceed eight 10-hour days, which are consecutive and uninterrupted by weather or other delays.
2. The estimated weight of excavated material will not exceed 980 tons.
3. Landscape debris from chipping of cleared materials will be utilized as mulch for excavated areas or provided to residents.
4. Excavated materials will be transported to Milam Landfill as a Special Waste.
5. Replacement costs for fencing and shrubs do not exceed the costs indicated in the estimate.
6. Site restoration costs for materials do not exceed the costs indicated in the estimate.
7. Bodine has assumed the Illinois EPA will complete the community relation efforts and access agreements, with owners and residents.
8. The volume estimates from the enclosed figures were converted to tons using a conversion factor of 1 cubic yard equals 1.5 tons.

7.0 Removal Action Objectives

Removal action objectives for this project have been established consistent with the "Data Quality Objectives Process for Superfund," USEPA, 1993 as indicated in Section 3.0. The project goal is to remove lead contaminated surface soils exceeding the Action Level of 400 ppm for those areas recommended for remediation under Section 5.0.

A vertical depth limitation of three (3) fbg's has been included as a Removal Action Objective. This removal action objective is derived from the exposure pathway represented in the calculation of the 400-ppm Action Level. The 35 IAC 742, TACO regulations provide for an engineered barrier as part of the calculation of soil remediation objectives. The removal of lead contaminated surface soil to a depth of 3 feet and placement of uncontaminated top soil as backfill will provide the "engineered barrier" as stated in 35 IAC 742.

Therefore, the following is a statement of the Removal Action Objectives for this project:

1. Remove, transport and disposed of lead contaminated surface soils as recommended for removal in Section 5.0 and indicated in Appendix B figures.
2. Confirmation sampling will be conducted using an XRF field screening device to confirm the Removal Action Objectives are achieved:
 - a. Remaining lead soil concentrations below 400 ppm; or,
 - b. Excavation depth equal to or greater than 3 fbg's as measured in the field.
3. Restoration of site structures and restoration of excavation areas to grade with topsoil, seeding and strawing.

Appendix A

Background Documents

MELC Member Organizations and Eventual Resource Contributions

U.S. Army Corp of Engineers (Federal/St. Louis, MO)	N/A	Technical assistance and site assessment, Implemented Brownfields Showcase Community Award
U.S. Environmental Protection Agency (Federal/Chicago, IL)	N/A	Facilitation and technical assistance, Grant money
U.S. Dept of Housing and Urban Development (Federal/Springfield, IL) and The Lead Hazard Control Grant Office (Federal/Washington DC)	N/A	Technical assistance, Grant money
U.S. Dept of Agriculture/Natural Resources Conservation Office (Federal/Champaign, IL)	N/A	Technical assistance, Grant money
East-West Gateway Coordinating Council (Non-Profit)	East St. Louis	Grantee, Soil Sampling, Outreach
Enterprise Community Vision 20/20 (Non-Profit)	East St. Louis	Lead assessment, Redevelopment efforts
East Side Health District (Local)	East St. Louis	Blood lead screening, Outreach
Illinois Environmental Protection Agency Collinsville, IL office (State)	NA	Technical assistance, Outreach, Grant money
Illinois Department of Public Health (State)	NA	Grantee, Soil sampling, Blood lead screening
NEIGHBORS United for Progress (Non-Profit)	East St. Louis	Lead based paint assessments, Outreach
Neighbors Technical Assistance Center (Non-Profit)	East St. Louis	Grantee, Outreach
Regional Vocational System (Academic)	East St. Louis, St. Clair County	Outreach
St. Louis Community College (Academic)	East St. Louis	Grantee - job training, Outreach
St. Clair County Intergovernmental Grants Department (County)	St. Clair County	Grantee, Blood lead screening, Lead assessment, Outreach
St. Mary's Hospital Corporate Health Center (Private)	East St. Louis, St. Clair County	Grantee, Blood lead screening, Outreach
Southwestern Illinois Resource Conservation Development (County)	St. Clair County	Grantee (biosolid remediation program)
East St. Louis Community Development Block Grant Operations, Inc. (Local)	East St. Louis	Lead assessments



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

February 14, 2002

John Sherrill
Bureau of Land
Illinois EPA
1201 N. Grand Avenue East
Springfield, IL 62794-9276

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IEPA
FEB 19 2002
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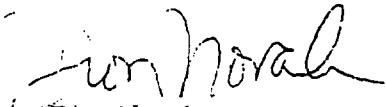
Dear Mr. Sherrill:

Kevin Turner and I have been engaged in ongoing conversations with Tom Miller with regards to potential IEPA assistance in the lead assessment and removal activities that are being conducted by U.S. EPA in the East St. Louis area under the direction of the Gateway initiative. Towards that end, Tom has requested that we refer specific sites where your assistance can help us in assessing and remediating as many lead contaminated properties as we can.

In this light, U.S. EPA has been working with the U.S. Army Corps of Engineers and their contractor, Roy F. Weston, to complete site assessments for 13 sites in the area. These include former industrial facilities and areas surrounding these sites, some of which are residential. U.S. EPA has completed four removals in the area to date and three more are in the planning stages for spring.

Two of these sites have surfaced as potential candidates for IEPA assistance. These are: Site 121-Adept Tool, 1315 N. 18th Street and Site 160, East St. Louis Awning, 1901 Ridge Avenue. I have attached sample results from sampling conducted in the summer and fall of 2001 along with sample maps to show where the samples were collected from. I have also asked Kevin to produce estimates for site removals based on this data which are summarized below.

Sincerely yours,



Dion Novak
Remedial Project Manager

cc: K. Turner, EPA
N. Emeric, EPA
B. Sypniewski, EPA
T. Miller, IEPA
L. Morgan, EPA
S. Deuber, IEPA

Attachments

U.S. Environmental Protection Agency Metro East Soil Sampling Work Update

Background

Due to community concerns and request, US EPA provided a grant to the Illinois Department of Public Health (IDPH) to conduct lead soil sampling in the East St Louis area from 1999-2000. The purpose of the sampling was to determine if historical elevated blood lead levels could be attributed to historical industrial sources that were identified on old insurance and sanborn maps. The IDPH sampling was designed to determine if the industrial facilities would qualify for US EPA Superfund support.

Location - The sites are located throughout the City of East St. Louis.

Site 133 - Western Forge Works	Summit Avenue & 17 th Street
Site 147 - Carr Lead Products Company	707 North 20 th Street
Site 148 - Deranek and Son	51 South 10 th Street
Site 300 - 15th and Converse	210 South 15th Street
Site 118 - Eagle Picher Lead Company	305 St. Clair Avenue
Site 154 - InterCoastal Paint Corporation	1248 Walnut Avenue
Site - Lefton Iron & Metal	205 South 17 th Street
Site 121 - Adept Tool	1315 N. 18 th St.
Site 136 - United Iron and Metal	303 S. 11 th St.
Site 141 - Reese Sheet Metal Works	206 N. 10 th St.
Site 143 - Bauer Sheet Metal Works	1502 State St.
Site 160 - East St. Louis Awning	1901 Ridge
Site 181 - Steel Baling Company	1901 Converse Ave.
Site 185 - Blair-Tirrell Boiler	815 S. 19 th St.
Site 145 - Shippers Car Line	100 Trendley Ave.
Site 157 - Republic Iron and Steel	Valentine Ave.
Site 173 - Darling and Company	Mississippi Ave and A & F RR
Site 178 - Voelker Plating Works	435 N. 26 th St.
Site 155 - Flannery & Sons	2105 State St.
Site 158/59 - Flannery Concrete	574 N. 20 th St.

Prioritization of the facilities will be based on the levels of soil contamination detected; proximity of the industry facility to more sensitive areas such as residential, park, church or school sites and proximity of the facilities to areas with known elevated blood lead. Sampling at the facilities and in the surrounding residential properties will primarily be for lead in soil although at each industrial facility, other samples will be collected and analyzed for contaminants that may be specific to the nature of the industry.

Maps

Mapping of all sampling in the area will be compiled by an EPA contractor (Tetra Tech EMI) and will include historical information and all future sampling by EPA and other entities.

Future Actions

US EPA will continue to assess and conduct soil sampling at the nineteen former industrial facilities and in the residential areas near the facilities throughout the year. Once the assessments are complete and soil sampling results are compiled, EPA will determine whether the facility and surrounding residential areas will require cleanup. Cleanup actions are expected to begin in some areas in early September 2001. Assessment on the remaining facilities will be completed once access to the industrial facilities is obtained from the current land owner(s).

Other USEPA Superfund areas in the Metro East (ongoing)

Swift Chem Ag	2501 North Kings Highway, Fairmont City
Old American Zinc	2575 North Kings Highway, Fairmont City
Clayton Chemical Company	1 Mobile Ave, Sauget
Dead Creek Removal	Sauget, IL
St. Louis Auto Shredding Drum Disposal	Madison, IL

For more information contact

Noemi Emeric,	312-886-0995	emeric.noemi@epa.gov
Gateway Regional Team Manager		
US EPA Region 5		

Project Partners

<i>US Environmental Protection Agency Region 5</i>		
Kevin Turner, OSC	618-997-0115	turner.kevin@epa.gov
Dion Novak, Project Manager	312-886-4737	novak.dion@epa.gov
Michael Harris, OSC	312- 886-0760	harris.michael@epa.gov

Illinois Department of Public Health

Dave Webb	618-656-6680	dwebb@idph.state.il.us
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Illinois Environmental Protection Agency

Tom Miller	618-346-5154	tom.miller@epa.state.il.us
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BUREAU OF LAND INVENTORY DATA INPUT FORM

INVENTORY # ISSUED:

TRAN CODE

TRAN DATE

1 63 045 5241

Add

Change
14 (CIRCLE)

15 1 1 20 YYY
(LEAVE BLANK) 21 22

010 FACILITY NAME

East St Louis Avenue

USEPA#:

NAICS CODE:

IEMA INCIDENT #:

020 LOCATION ADDRESS (STREET ADDRESS REQUIRED)

SEND MAIL HERE

STREET: 1901 Ridge

P. O. BOX:

CITY: East St Louis

STATE: IL

ZIP: 62201

TELEPHONE:

CONTACT: Claudia Davis

MAIL IND: 2

COUNTY: St Clair

TOWNSHIP:

30 OWNER ADDRESS (IF SAME AS ABOVE, LEAVE BLANK):

SEND MAIL HERE

NAME: Claudia Davis

STREET: 1310 Mississippi Ave

P.O. BOX: CITY: East St Louis

STATE: IL ZIP: 62201

TELEPHONE:

CONTACT:

MAIL IND:

040 OPERATOR ADDRESS (IF SAME AS ABOVE, LEAVE BLANK):

SEND MAIL HERE

NAME:

STREET:

P.O. BOX: CITY:

STATE: ZIP:

TELEPHONE:

CONTACT:

MAIL IND:

SEND FAX TO: BOL/JIM PIERCE 217/782-9290 RETURN FAX #: 618 1346 5155

FROM (PRINT NAME): Tom Miller

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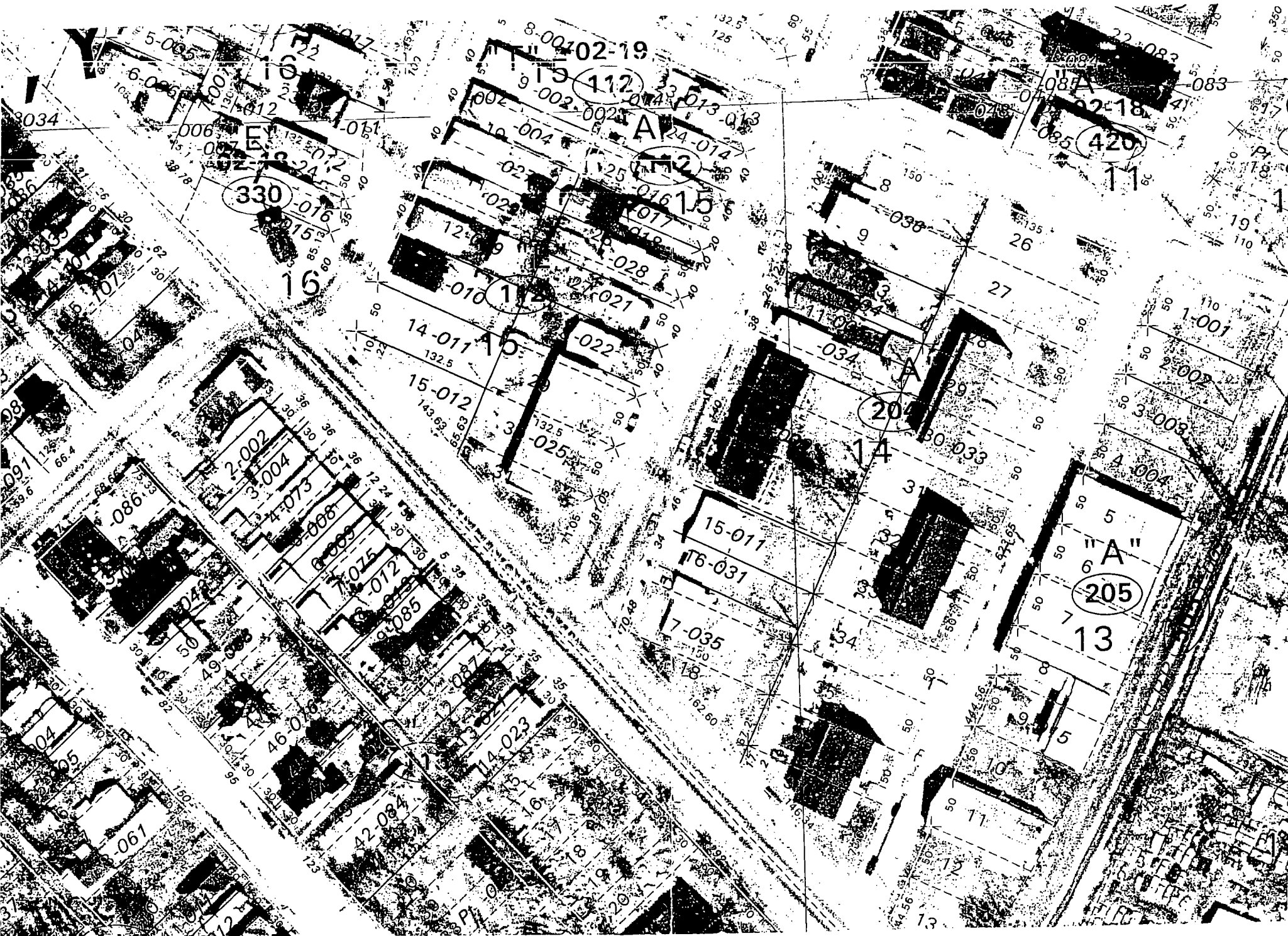
TELEPHONE #: 618 1346 5120

DATE: 21 22 102

PREVIOUS COMPANY NAME:

Appendix B

Aerial Photographs





WESTON
MANAGERS DESIGNERS/CONSULTANTS

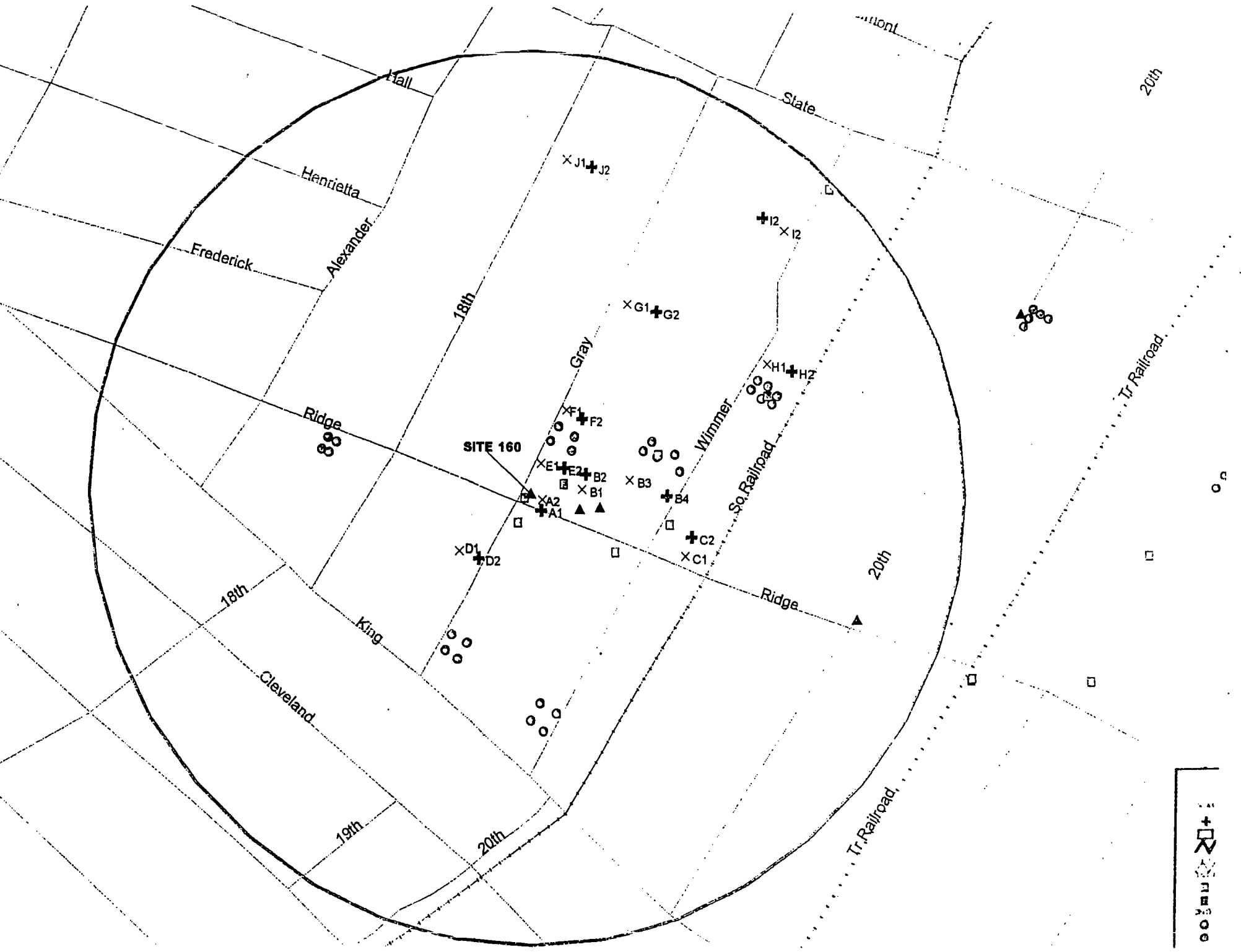
750 E. Bunker Ct.
Suite 500
Vernon Hills, Illinois
60061

AERIAL PHOTOGRAPH OF SITE 160
MISSISSIPPI RIVER GATEWAY INITIATIVE
East St. Louis, Illinois

East St. Louis Awaing

Appendix C

Maps

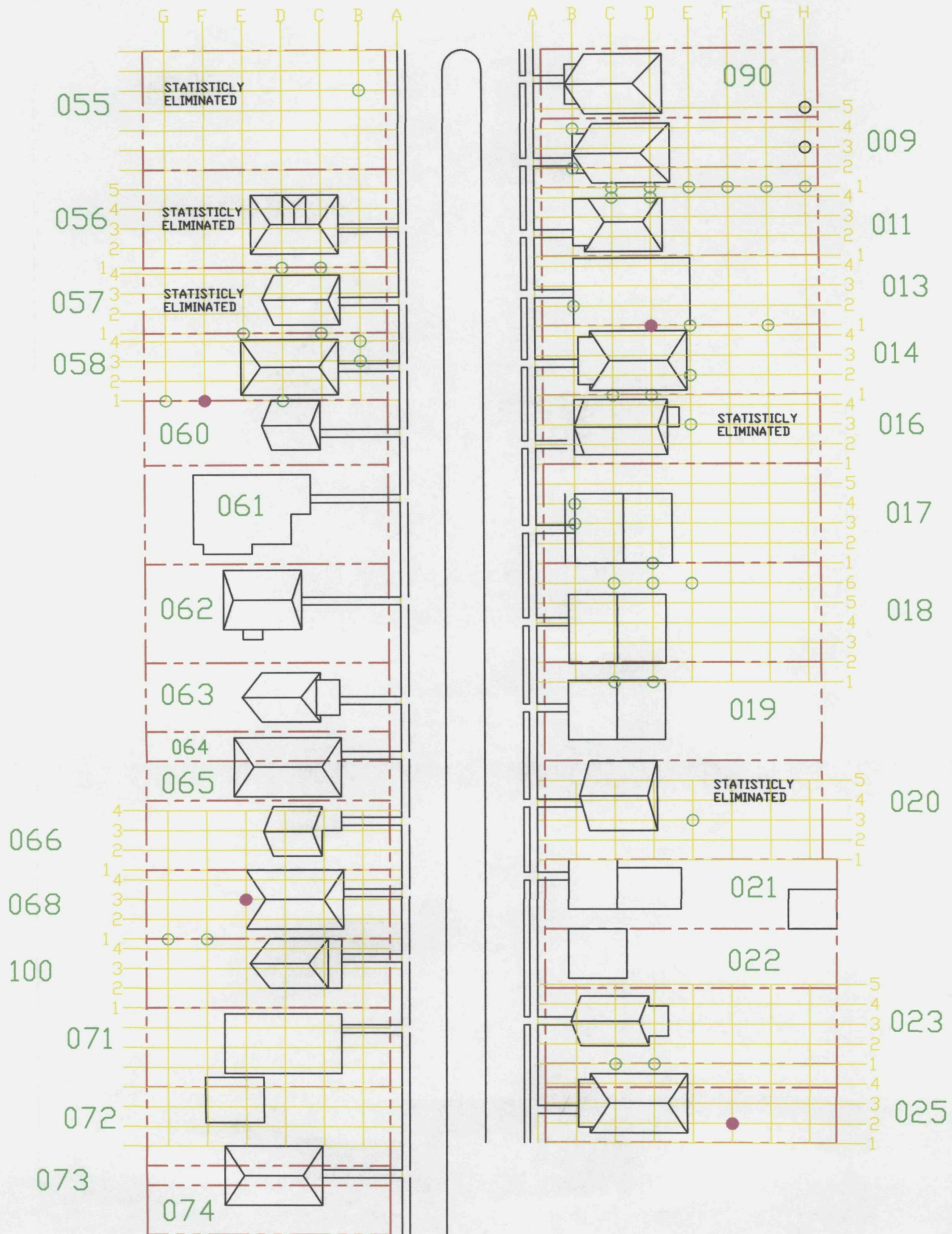


D


Appendix D

Investigation Figures

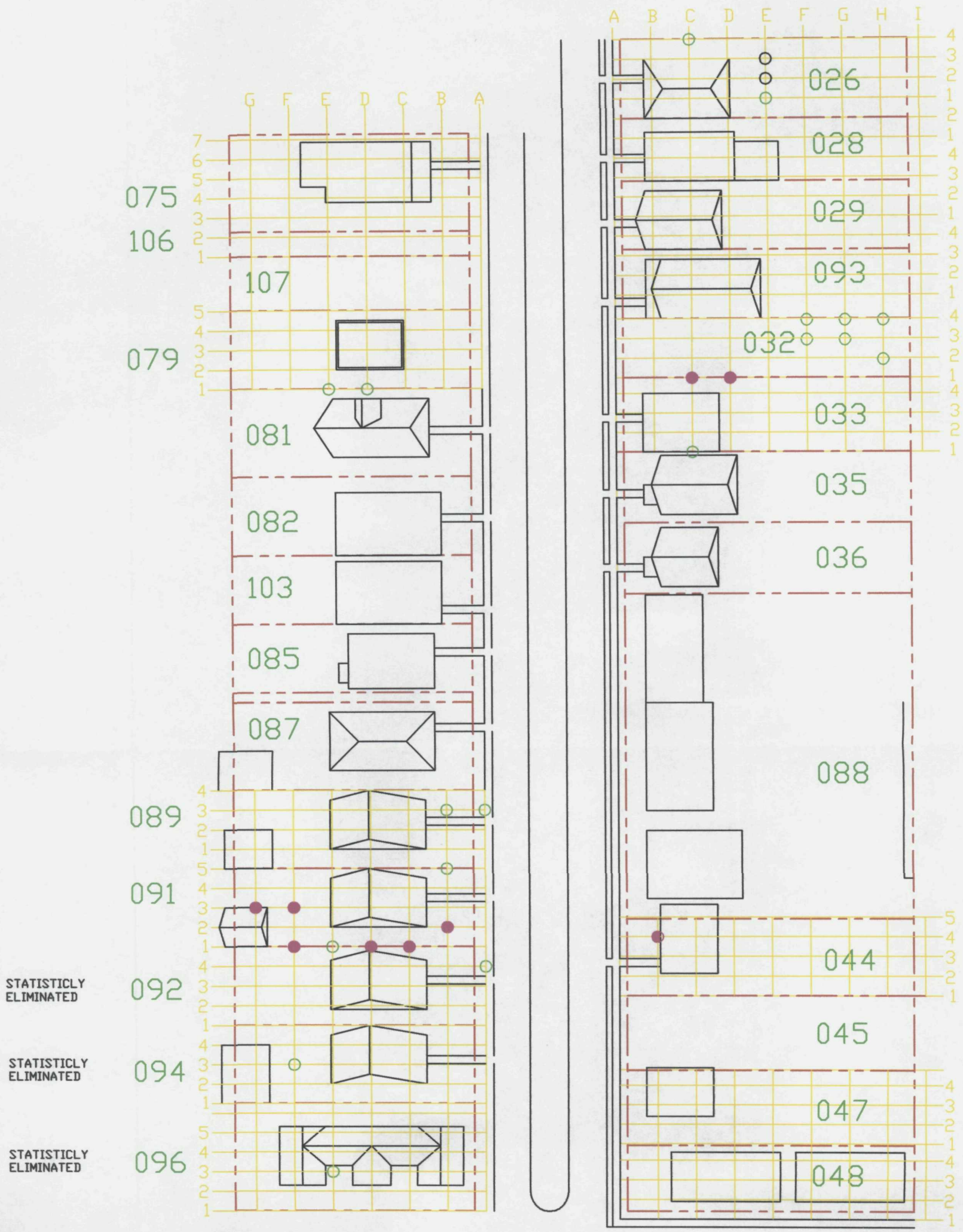
LAST REVISION	DATE	BY
ADD SAMPLE RESULTS	6-27-02	JEM




O = 1 TO 400 PPM
 O = 400 TO 1000 PPM
 ● = 1000 PPM AND UP

 = TREES (TYP.)

LAST REVISION	DATE	BY
ADD SAMPLE RESULTS	6-27-02	JEM

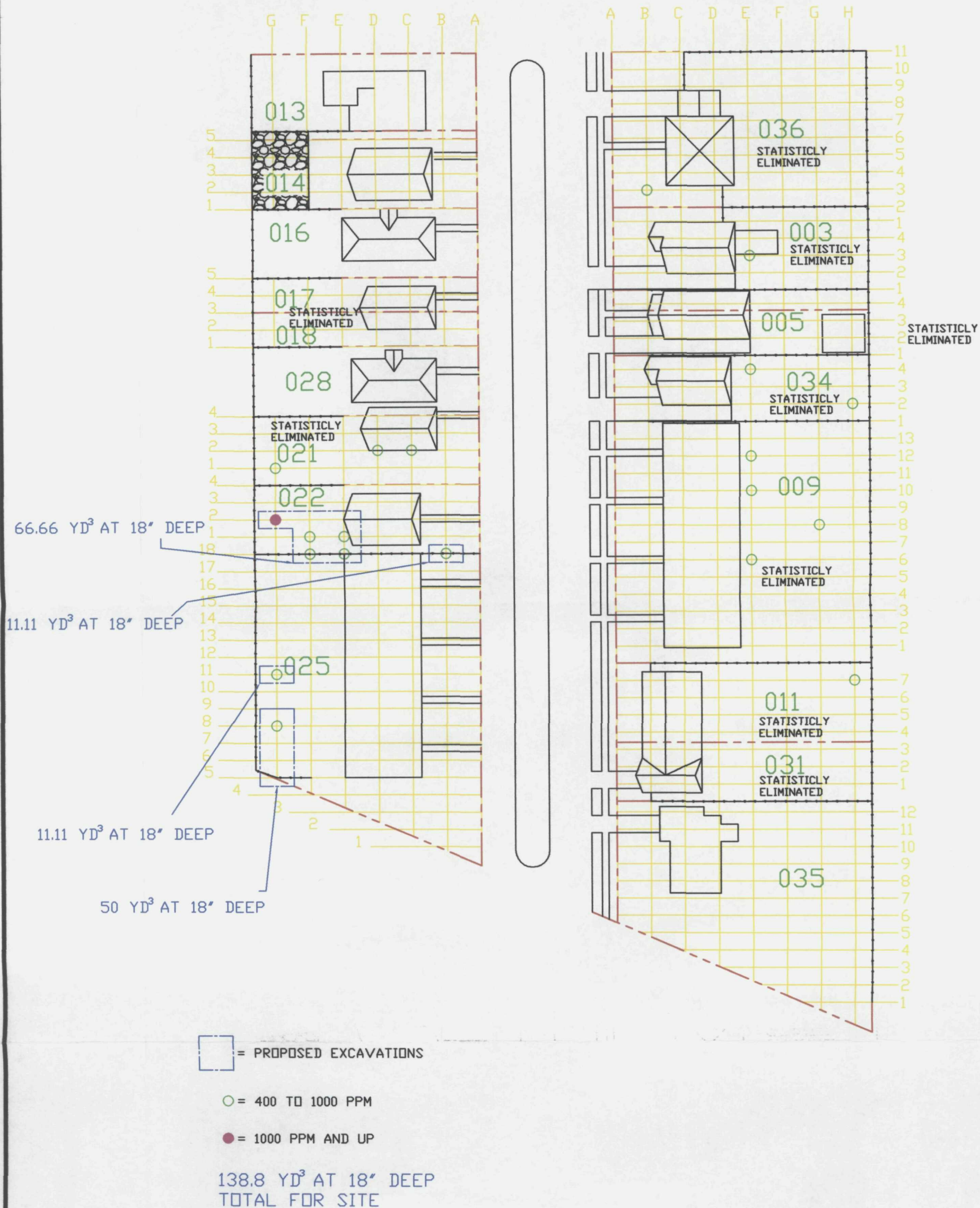


- O = 1 TO 400 PPM
- = 400 TO 1000 PPM
- = 1000 PPM AND UP
-  = TREES (TYP.)

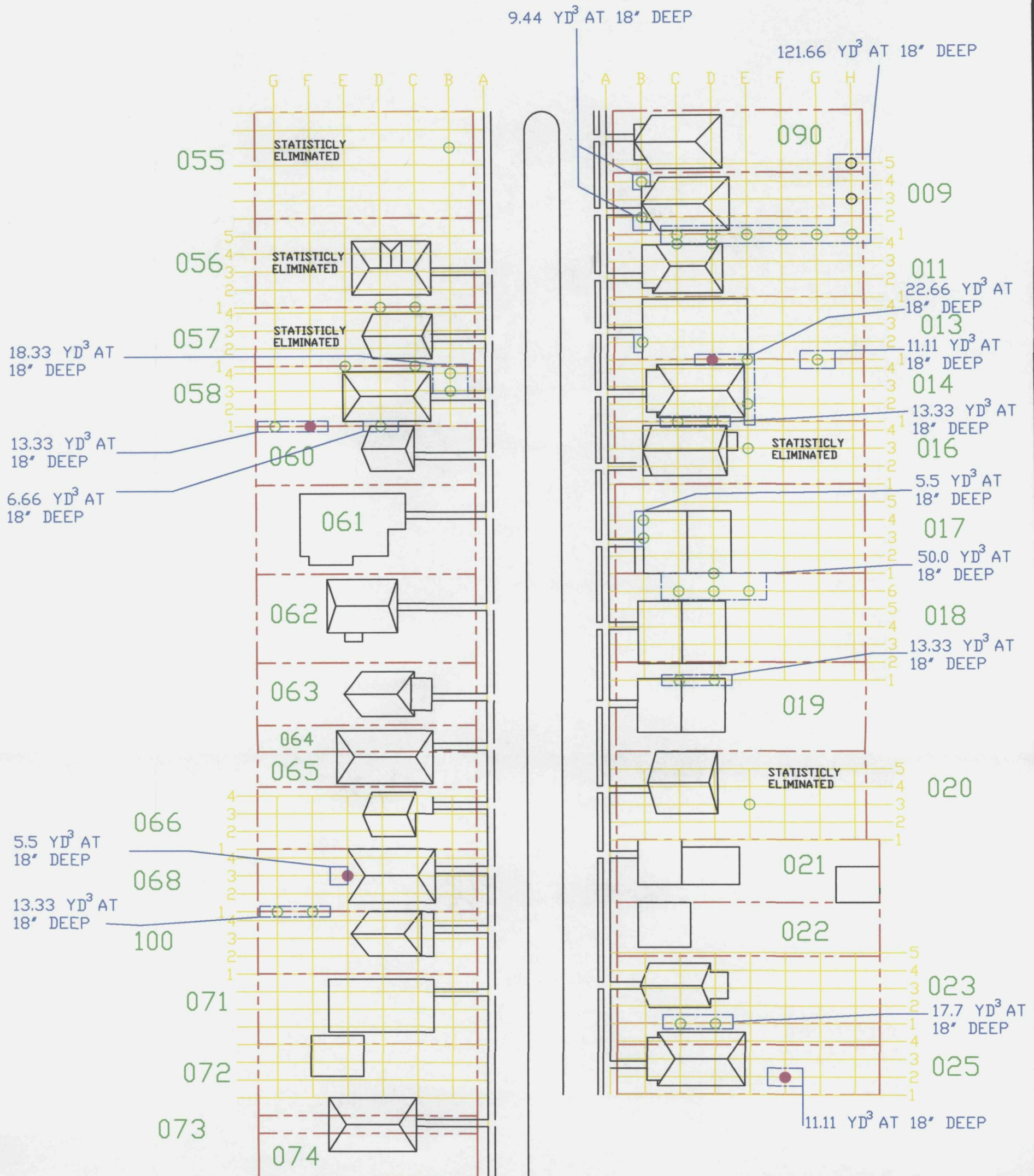
Appendix E

Removal Action Figures

LAST REVISION	DATE	BY
ADD SAMPLE RESULTS	6-27-02	JEM
ADD EXCAVATIONS	7-08-02	JEM



LAST REVISION	DATE	BY
ADD SAMPLE RESULTS	6-27-02	JEM



= PROPOSED EXCAVATIONS

= 1 TO 400 PPM

= 400 TO 1000 PPM

= 1000 PPM AND UP

= TREES (TYP.)

332.99 YD³ AT 18" DEEP TOTAL
FOR SITE

BODINE
ENVIRONMENTAL SERVICES, INC.

30'
0 60'

Scale: 1" = 60'
Drawing #: ESL-3

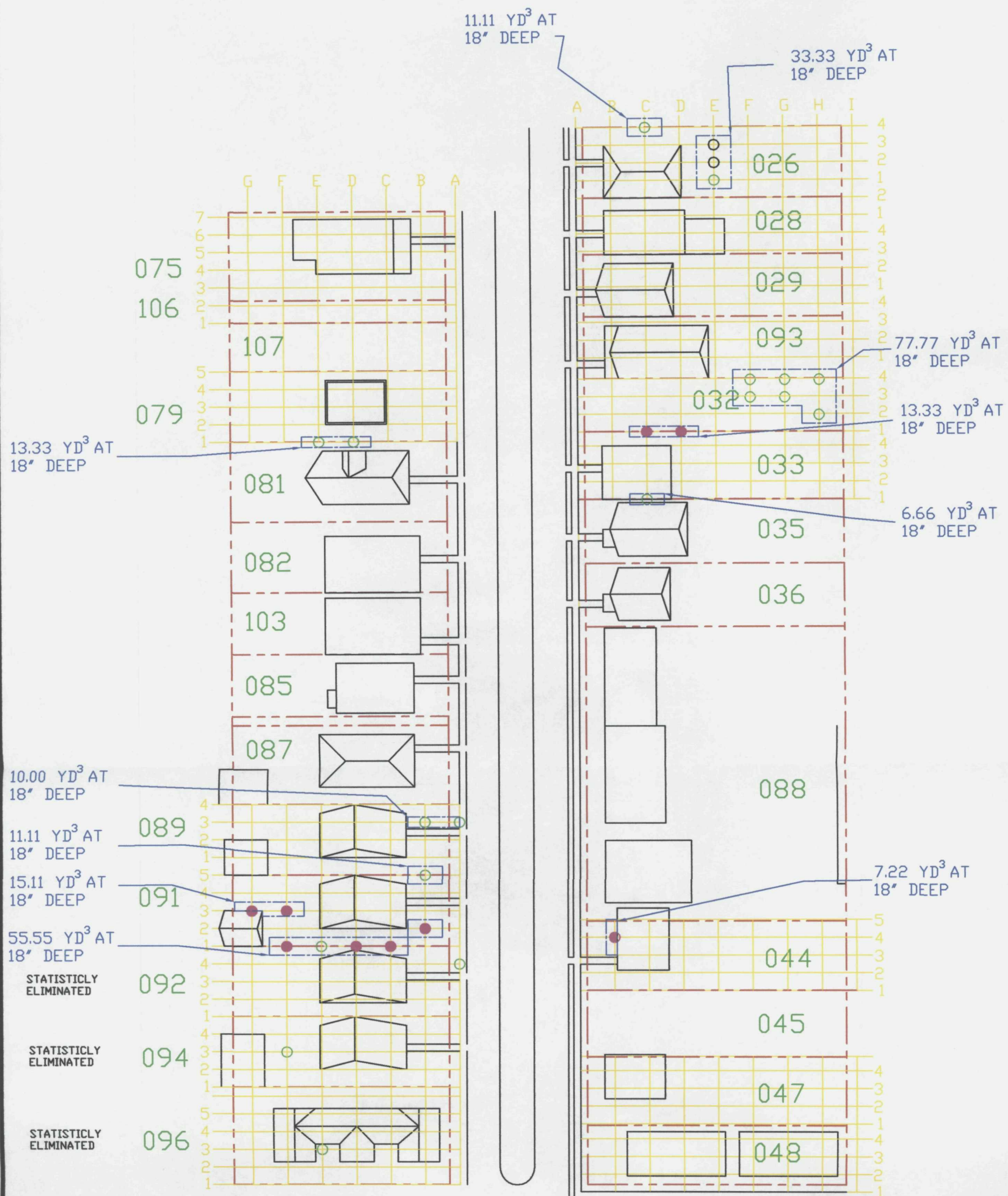
EAST ST. LOUIS AWNING

BODINE PROJECT NO. 112025

PARCEL 160
SAMPLE GRID
EAST ST. LOUIS, ILLINOIS

Date: 5-16-02 Drawn by: J. MARTIN Ck. by:

LAST REVISION	DATE	BY
ADD SAMPLE RESULTS	6-27-02	JEM

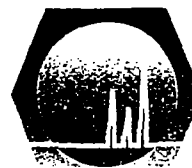


- [] = PROPOSED EXCAVATIONS
- = 1 TO 400 PPM
- = 400 TO 1000 PPM
- = 1000 PPM AND UP
- [Tree Symbol] = TREES (TYP.)

Appendix F

Laboratory Reports

Prairie



An Analytical
Testing Laboratory

Analytical
Systems, INCORPORATED

2 July 2002

Mr. Stephen Nussbaum
Bodine Environmental Services, Inc.
5350 East Fire House Road
Decatur, IL 62521

1265 Capital Airport Drive
Springfield, IL 62707-8490

Phone: 217-753-1148
FAX: 217-753-1152
E-Mail: IL100323@aol.com

RE: PAS Project Code **BES-1817**

Dear Mr. Nussbaum,

This report contains the analytical results for **Illinois EPA-Adept Tool & E. St. Louis Awning -112024 & 112025** samples received under chain of custody by Prairie Analytical Systems, Inc. on 28-May-02.

All applicable quality control procedures met method specific acceptance criteria.

This report shall not be reproduced, except in full, without the prior written consent of Prairie Analytical Systems, Inc.

If you have any questions, please feel free to call me at (217) 753-1148.

Sincerely,

Kent Ballard
Kent Ballard, PhD
QA/QC Officer

CC: Project File

Certificate of Analysis



Bodine Environmental Services, Inc.
5350 East Fire House Road
Decatur, IL 62521

1265 Capital Airport Drive
Springfield, IL 62707-8490
Phone: 217-753-1148
Facsimile: 217-753-1152
E-Mail: IL100323@aol.com

Client Project: Illinois EPA-Adept Tool & E. St. Louis Awning-112024 & 112025
PAS Project Code: BES-1817

Sample Description:	Con-1	---	---	---	---
PAS Sample Number:	02052804781	---	---	---	---
Matrix:	Solid	---	---	---	---
Date Sampled:	23-May-02	---	---	---	---
Date Received:	28-May-02	---	---	---	---
Date Analyzed:	29-May-02	---	---	---	---
Date Reported:	2-Jul-02	---	---	---	---

Organic Compound(s) Analysis

Parameter(s)	RL / Unit	Result	Result	Result	Result	Result	Method
TCLP Volatile Organic Compounds							
Vinyl Chloride	0.018 mg/L	U	---	---	---	---	5030B/8260B(1)
1,1-Dichloroethene	0.013 mg/L	U	---	---	---	---	5030B/8260B(1)
Chloroform	0.005 mg/L	U	---	---	---	---	5030B/8260B(1)
1,2-Dichloroethane	0.003 mg/L	U	---	---	---	---	5030B/8260B(1)
Carbon Tetrachloride	0.012 mg/L	U	---	---	---	---	5030B/8260B(1)
Benzene	0.020 mg/L	U	---	---	---	---	5030B/8260B(1)
Trichloroethene	0.012 mg/L	U	---	---	---	---	5030B/8260B(1)
Tetrachloroethene	0.003 mg/L	U	---	---	---	---	5030B/8260B(1)
Chlorobenzene	0.020 mg/L	U	---	---	---	---	5030B/8260B(1)
2-Butanone (MEK)	0.020 mg/L	U	---	---	---	---	5030B/8260B(1)
TCLP Semi-Volatile Organic Compounds							
o-Cresol	0.010 mg/L	U	---	---	---	---	8270C(1)
m-Cresol	0.010 mg/L	U	---	---	---	---	8270C(1)
p-Cresol	0.010 mg/L	U	---	---	---	---	8270C(1)
Total Cresols	0.010 mg/L	U	---	---	---	---	8270C(1)
1,4-Dichlorobenzene	0.010 mg/L	U	---	---	---	---	8270C(1)
2,4-Dinitrotoluene	0.010 mg/L	U	---	---	---	---	8270C(1)
Hexachlorobenzene	0.010 mg/L	U	---	---	---	---	8270C(1)
Hexachlorobutadiene	0.010 mg/L	U	---	---	---	---	8270C(1)
Hexachloroethane	0.010 mg/L	U	---	---	---	---	8270C(1)
Nitrobenzene	0.010 mg/L	U	---	---	---	---	8270C(1)
Pentachlorophenol	0.050 mg/L	U	---	---	---	---	8270C(1)
Pyridine	0.010 mg/L	U	---	---	---	---	8270C(1)
2,4,5-Trichlorophenol	0.010 mg/L	U	---	---	---	---	8270C(1)
2,4,6-Trichlorophenol	0.010 mg/L	U	---	---	---	---	8270C(1)

Certificate of Analysis



Bodine Environmental Services, Inc.
5350 East Fre House Road
Decatur, IL 62521

1265 Capital Airport Drive
Springfield, IL 62707-8490
Phone: 217-753-1148
Facsimile: 217-753-1152
E-Mail: IL100323@aol.com

Client Project: Illinois EPA-Adept Tool & E. St. Louis Awning-112024 & 112025
PAS Project Code: BES-1817

Sample Description:	Con-1	---	---	---	---
PAS Sample Number:	02052804781	---	---	---	---
Matrix:	Solid	---	---	---	---
Date Sampled:	23-May-02	---	---	---	---
Date Received:	28-May-02	---	---	---	---
Date Analyzed:	29-May-02	---	---	---	---
Date Reported:	2-Jul-02	---	---	---	---

Organic Compound(s) Analysis

Parameter(s)	RL / Unit	Result	Result	Result	Result	Result	Method
Aroclor-1016	33.5 µg/kg	U	---	---	---	---	8081A(1)
Aroclor-1221	36.1 µg/kg	U	---	---	---	---	8081A(1)
Aroclor-1232	43.5 µg/kg	U	---	---	---	---	8081A(1)
Aroclor-1242	43.5 µg/kg	U	---	---	---	---	8081A(1)
Aroclor-1243	60.3 µg/kg	U	---	---	---	---	8081A(1)
Aroclor-1254	67.0 µg/kg	U	---	---	---	---	8081A(1)
Aroclor-1260	67.0 µg/kg	U	---	---	---	---	8081A(1)
Aroclor-1262	67.0 µg/kg	U	---	---	---	---	8081A(1)
Aroclor-1263	67.0 µg/kg	U	---	---	---	---	8081A(1)

Element(s) Analysis

Parameter(s)	RL / Unit	Result	Result	Result	Result	Result	Method
TCLP Element(s)							
Arsenic(⁷⁵ As), TCLP	0.001 mg/L	0.010	---	---	---	---	200.8(3)
Barium(¹³⁷ Ba), TCLP	0.001 mg/L	2.020	---	---	---	---	200.8(3)
Cadmium(¹¹¹ Cd), TCLP	0.001 mg/L	0.015	---	---	---	---	200.8(3)
Chromium(⁵³ Cr), TCLP	0.001 mg/L	0.002	---	---	---	---	200.8(3)
Lead(²⁰⁸ Pb), TCLP	0.001 mg/L	0.038	---	---	---	---	200.8(3)
Mercury(²⁰² Hg), TCLP	0.0001 mg/L	U	---	---	---	---	200.8(3)
Selenium(⁷⁷ Se), TCLP	0.001 mg/L	U	---	---	---	---	200.8(3)
Silver(¹⁰⁷ Ag), TCLP	0.001 mg/L	U	---	---	---	---	200.8(3)

Certificate of Analysis



Bodine Environmental Services, Inc.
5350 East Fire House Road
Decatur, IL 62521

1265 Capital Airport Drive
Springfield, IL 62707-8490
Phone: 217-753-1148
Facsimile: 217-753-1152
E-Mail: IL1Q0323@aol.com

Client Project: Illinois EPA-Adept Tool & E. St. Louis Awning-112024 & 112025
PAS Project Code: BES-1817

Sample Description:	Con-1	---	---	---	---
PAS Sample Number:	02052804781	---	---	---	---
Matrix:	Solid	---	---	---	---
Date Sampled:	23-May-02	---	---	---	---
Date Received:	28-May-02	---	---	---	---
Date Analyzed:	29-May-02	---	---	---	---
Date Reported:	2-Jul-02	---	---	---	---

Inorganic(s) Analysis

Parameter(s)	RL / Unit	Result	Result	Result	Result	Result	Method
Cyanide, Total	1.0 mg/kg	U	---	---	---	---	9014(1)
Sulfide, Reactive	1.0 mg/kg	U	---	---	---	---	846/7.3.4(1)
Phenolics, Total	1.0 mg/kg	1.33	---	---	---	---	9065(1)
EIOX	10.0 mg/kg	149	---	---	---	---	9023(1)
pH	Units	6.8	---	---	---	---	9045C(1)
Flashpoint	°F	>200	---	---	---	---	D92(4)
Paint Filter	---	Pass	---	---	---	---	9095(1)
Solids, Total	0.01%	79.0	---	---	---	---	2540B(2)
Water Compatibility	---	Pass	---	---	---	---	5058-90D(4)
Physical Appearance 'W/ Cdor	---	N/A	---	---	---	---	

End of Report

- (1) - Analysis performed Using SW846 "Test Methods for Evaluating Solid Waste"
- (2) - Analysis performed Using "Standard Methods for the Examination of Water and Wastewater", 20th Edition
- (3) - Analysis performed using "Methods for Chemical Analysis of Water and Wastes"
- (4) - Analysis performed using ASTM Method

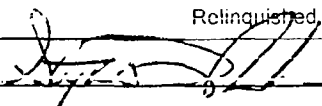
1265 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152 - E-mail IL100323@aol.com



Prairie Analytical

Systems, INCORPORATED
-F. St. Louis Aw

Adept Tool & Systems, INCORPORATED
E. St. Louis Mo

Client	Bodine Environmental Services Inc.				Client Project	Illinois EPA - East Saint Louis Sites 121 & 122				
Address	5350 E. Firehouse Road				Project Location	East Saint Louis, IL				
City, State Zip Code	Decatur, IL 62521				Sampler(s) / Phone No.	Stephen Nussbaum / 217 428-3629				
Phone / Facsimile No.	217-428-3629 / 217-864-2086				Turnaround Time	Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Date Required:				
Contact Person	Stephen Nussbaum				P.O. # or Invoice To	112024 & 112025				
Sample Description (10 Characters Only)	Sampling		Container		³ M / ⁴ P Code	Analysis and / or Method Requested (If there are any questions, please call.)	PAS Sample Number			
	Date	Time	¹ Size	² Type / No.			Accepted / Rejected			
Conf - 1	5/23/02	1630	6oz	12	S / A	Green Sheet with PCBs	02052804781	A [4R] []		
				/	/			A [] R []		
				/	/			A [] R []		
				/	/			A [] R []		
				/	/			A [] R []		
				/	/			A [] R []		
				/	/			A [] R []		
				/	/			A [] R []		
				/	/			A [] R []		
				/	/			A [] R []		
				/	/			A [] R []		
				/	/			A [] R []		
				/	/			A [] R []		
¹ Size of Container	40 mL		125 mL		250 mL		500 mL	1000 mL	O - Other (Specify)	
² Type of Container	G - Glass (Clear)		AG - Glass (Amber)		P - HDPE		VC - Volatile Core	SC - Soil Core	O - Other (Specify)	
³ M = Matrix Code	A - Aqueous		DW - Drinking Water		NA - Non-aqueous Liquid		SE - Saline Water	S - Solids	O - Other (Specify)	
⁴ P = Preservative Code	A - None		B - HNO ₃		C - H ₂ SO ₄		D - NaOH	E - HCl	O - Other (Specify)	
Relinquished By			Date	Time	Received By			Date	Time	Method of Shipment
			5/23/02	1730	Kent Ballant			5/28/02	5:30 p	Hand
Special Instructions: See Attached Analytical Requirements from Milan In										PAS Project Code BES-1817

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B209656

SAMPLING POINT DESC. : P51 EAST ST LOUIS AWNING X101 ⇒ Parcel 02-18.0-420-013
Grid Location D1

SUBMITTING SOURCE # :

SITE # :

DATE COLLECTED : 020523

TIME COLLECTED : 1625

SAMPLING PROGRAM :

COLLECTED BY : TM

DELIVERED BY : UPS

COMMENTS :

FUNDING CODE : LP52

AGENCY ROUTING : 00

UNIT CODE :

SAM TYPE CODE :

SAMPLE PURPOSE CODE : 0

REPORTING INDICATOR : B

DATE RECEIVED : 020531

TIME RECEIVED : 0900

RECEIVED BY : PMD

LAB OBSERVATIONS :

TRIP BL SAM# :

SUPERVISORS INITIALS : SMM

NOTE : K = LESS THAN VALUE

P70318 SOLIDS,% WET SAMPL % : 79.8 P01052 LEAD,SW846 D/WT MG/KG : 2600

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B209657

SAMPLING POINT DESC. : P51 EAST ST LOUIS AWNING X102 ⇒ Parcel 02-18.0-420-014
Grid Location C1

SUBMITTING SOURCE # :

SITE # :

DATE COLLECTED : 020523

TIME COLLECTED : 1625

SAMPLING PROGRAM :

COLLECTED BY : TM

DELIVERED BY : UPS

COMMENTS :

FUNDING CODE : LP52

AGENCY ROUTING : 00

UNIT CODE :

SAM TYPE CODE :

SAMPLE PURPOSE CODE : 0

REPORTING INDICATOR : B

DATE RECEIVED : 020531

TIME RECEIVED : 0900

RECEIVED BY : PMD

LAB OBSERVATIONS :

TRIP BL SAM# :

SUPERVISORS INITIALS : SMM

NOTE : K = LESS THAN VALUE

P70318 SOLIDS,% WET SAMPL % : 98.5 P01052 LEAD,SW846 D/WT MG/KG : 910

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B209658

SAMPLING POINT DESC. : P51 EAST ST LOUIS AWNING X103

Parcel 02-19.0-112-025
Grid Location B18

SUBMITTING SOURCE # :

SITE # :

DATE COLLECTED : 020523

TIME COLLECTED : 1642

SAMPLING PROGRAM :

COLLECTED BY : TM

DELIVERED BY : UPS

COMMENTS :

FUNDING CODE : LP52

AGENCY ROUTING : 00

UNIT CODE :

SAM TYPE CODE :

SAMPLE PURPOSE CODE : 0

REPORTING INDICATOR : B

DATE RECEIVED : 020531

TIME RECEIVED : 0900

RECEIVED BY : PMD

LAB OBSERVATIONS :

TRIP BL SAM# :

SUPERVISORS INITIALS : SMM

NOTE : K = LESS THAN VALUE

P70313 SOLIDS,% WET SAMPL

% : 71.1

P01052 LEAD,SW846 D/WT

MG/KG : 2100

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B209659

SAMPLING POINT DESC. : P51 EAST ST LOUIS AWNING X104 = Parcel 02-18.0-420-032.
Grid Location D1

SUBMITTING SOURCE # :

SITE # :

DATE COLLECTED : 020523

TIME COLLECTED : 1635

SAMPLING PROGRAM :

COLLECTED BY : TM

DELIVERED BY : UPS

COMMENTS :

FUNDING CODE : LP52

AGENCY ROUTING : 00

UNIT CODE :

SAM TYPE CODE :

SAMPLE PURPOSE CODE : 0

REPORTING INDICATOR : B

DATE RECEIVED : 020531

TIME RECEIVED : 0900

RECEIVED BY : PMD

LAB OBSERVATIONS :

TRIP BL SAM# :

SUPERVISORS INITIALS : SMM

NOTE : K = LESS THAN VALUE

P70318 SOLIDS,% WET SAMPL % : 80.2 P01052 LEAD,SW846 D/WT MG/KG : 4300

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B209760

SAMPLING POINT DESC. : P52 EAST ST LOUIS/ADEPT TOOL X101

Parcel 02-180-215-001
Grid location H12

SUBMITTING SOURCE # :

SITE # : 1630455242

DATE COLLECTED : 020521

TIME COLLECTED : 1205

SAMPLING PROGRAM :

COLLECTED BY : TM

DELIVERED BY : UPS

COMMENTS :

FUNDING CODE : LP52

AGENCY ROUTING : 00

UNIT CODE :

SAM TYPE CODE :

SAMPLE PURPOSE CODE : 0

REPORTING INDICATOR : B

DATE RECEIVED : 020603

TIME RECEIVED : 1100

RECEIVED BY : PMD

LAB OBSERVATIONS :

TRIP BL SAM# :

SUPERVISORS INITIALS : SMM

NOTE : K = LESS THAN VALUE

P70318 SOLIDS,% WET SAMPL

% : 75.1

P01052 LEAD,SW846 D/WT

MG/KG : 970

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B209761

SAMPLING POINT DESC. : EAST ST LOUIS/ADEPT TOOL X102

Parcel 02-07.0-429-018

Grid Location D10

SUBMITTING SOURCE # :

SITE # : 1630455242

DATE COLLECTED : 020521

TIME COLLECTED : 1215

SAMPLING PROGRAM :

COLLECTED BY : TM

DELIVERED BY : UPS

COMMENTS :

FUNDING CODE : LP52

AGENCY ROUTING : 00

UNIT CODE :

SAM TYPE CODE :

SAMPLE PURPOSE CODE : 0

REPORTING INDICATOR : B

DATE RECEIVED : 020603

TIME RECEIVED : 1100

RECEIVED BY : PMD

LAB OBSERVATIONS :

TRIP BL SAM# :

SUPERVISOR'S INITIALS : SMM

NOTE : K = LESS THAN VALUE

P70318 SOLIDS,% WET SAMPL

% : 79.6

P01052 LEAD,SW846 D/WT

MG/KG : 750

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B209762

SAMPLING POINT DESC. : P52 EAST LOUIS ADEPT TOOL X103

Parcel 02-07.0-429-18
Grid Location F10

SUBMITTING SOURCE # :

SITE # : 1630455242

DATE COLLECTED : 020521

TIME COLLECTED : 1220

SAMPLING PROGRAM :

COLLECTED BY : TM

DELIVERED BY : UPS

COMMENTS :

FUNDING CODE : LP52

AGENCY ROUTING : 00

UNIT CODE :

SAM TYPE CODE :

SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 020603

TIME RECEIVED : 1100

RECEIVED BY : PMD

LAB OBSERVATIONS :

TRIP BL SAM# :

SUPERVISORS INITIALS : SMM

NOTE : K = LESS THAN VALUE

P70318 SOLIDS,% WET SAMPL

% : 86.4

P01052 LEAD,SW846 D/WT

MG/KG : 1200

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B209763

SAMPLING POINT DESC. : P52 EAST ST LOUIS/ADEPT TOOL X104

Parcel 02-18.0-215-022.
Grid Location GZ

SUBMITTING SOURCE # :

SITE # : 1630455242

DATE COLLECTED : 020521

TIME COLLECTED : 1230

SAMPLING PROGRAM :

COLLECTED BY : TM

DELIVERED BY : UPS

COMMENTS :

FUNDING CODE : LP52

AGENCY ROUTING : 00

UNIT CODE :

SAM TYPE CODE :

SAMPLE PURPOSE CODE : 0

REPORTING INDICATOR : B

DATE RECEIVED : 020603

TIME RECEIVED : 1100

RECEIVED BY : PMD

LAB OBSERVATIONS :

TRIP BL SAM# :

SUPERVISORS INITIALS : SMM

NOTE : K = LESS THAN VALUE

P70318 SOLIDS,% WET SAMPL

% : 72.9

P01052 LEAD,SW846 D/WT

MG/KG : 2700

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SAMPLE NUMBER : B209764

SAMPLING POINT DESC. : P52 EAST ST LOUIS/ADEPT TOOL X105

Parcel 02-18.0-215-022
Grid Location G1

SUBMITTING SOURCE # :

SITE # : 1630455242

DATE COLLECTED : 020521

TIME COLLECTED : 1235

SAMPLING PROGRAM :

COLLECTED BY : TM

DELIVERED BY : UPS

COMMENTS :

FUNDING CODE : LP52

AGENCY ROUTING : 00

UNIT CODE :

SAM TYPE CODE :

SAMPLE PURPOSE CODE : 0 REPORTING INDICATOR : B

DATE RECEIVED : 020603

TIME RECEIVED : 1100

RECEIVED BY : PMD

LAB OBSERVATIONS :

TRIP BL SAM# :

SUPERVISORS INITIALS : SMM

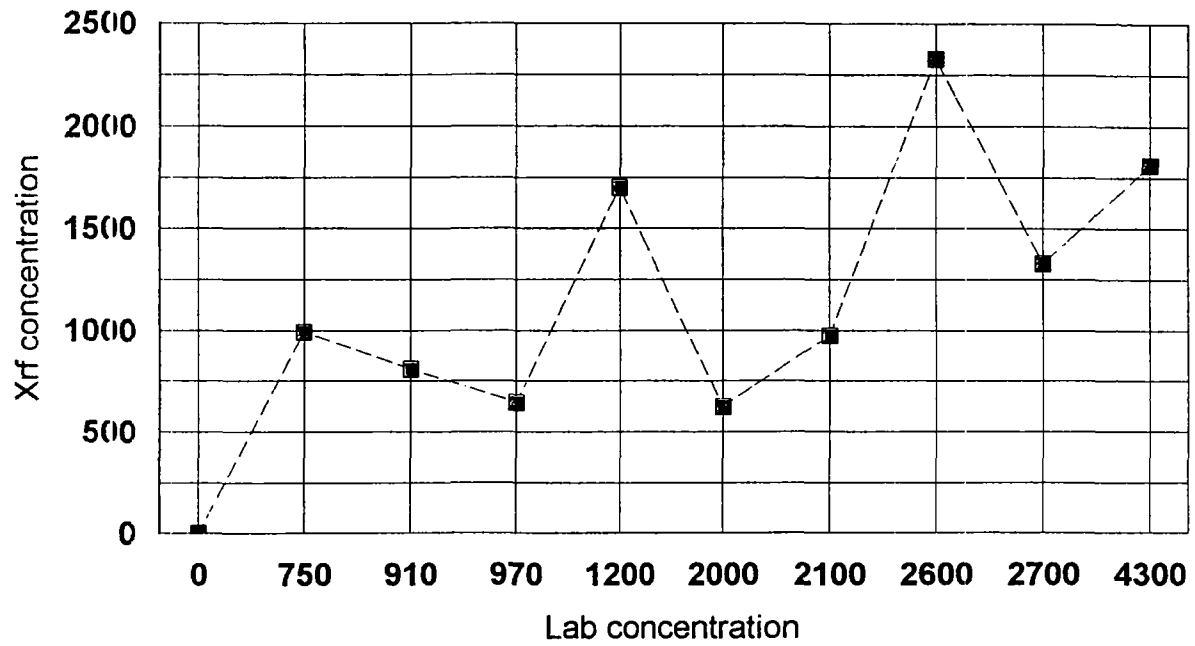
NOTE : K = LESS THAN VALUE

P7C318 SOLIDS,% WET SAMPL % : 78.9 P01052 LEAD,SW846 D/WT MG/KG : 2000

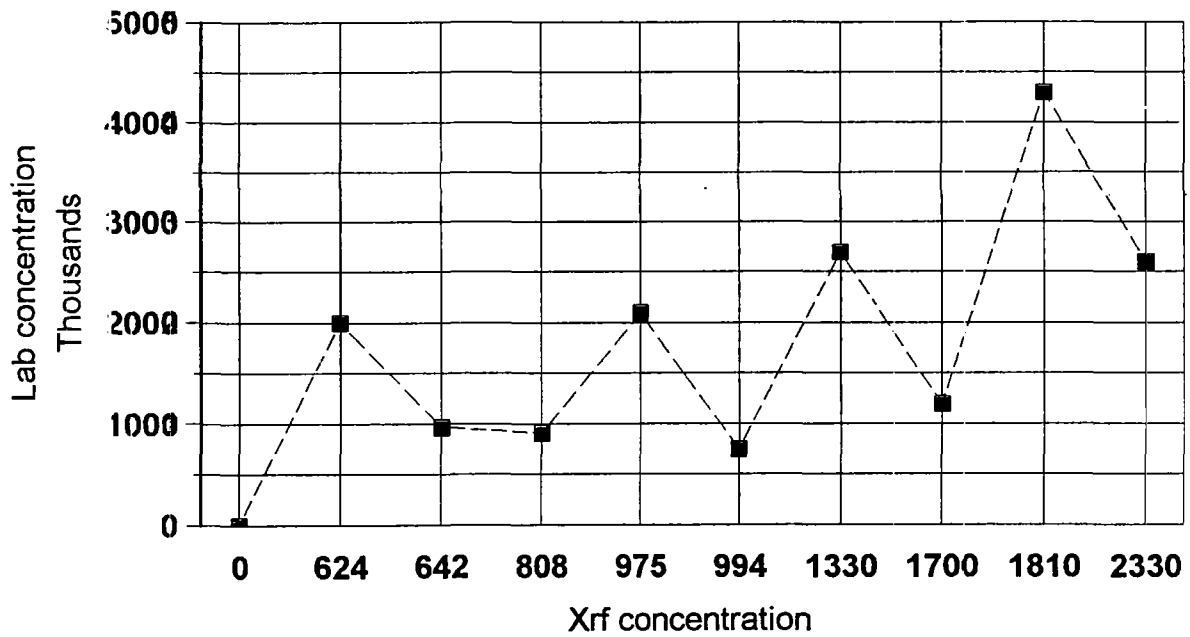
Table 1: Empirical Comparison of XRF Results Versus Fixed Laboratory Results

Parcel ID	Address	Sample Location	XRF [Lead] (ppm)	Lab Sample ID	Lab [Lead] (ppm)
02-18.0-420-013	580 Gray Blvd.	D1	2330	X101	2,600
02-18.0-420-014	578 Gray Blvd.	C1	808	X102	910
02-19.0-112-025	411 Gray Blvd.	B18	975	X103	2,100
02-18.0-420-032	536 Gray Blvd.	D1	1810	X104	4,300
02-18.0-215-001	1802-1808 N. 20th	H12	642	X101	970
02-7.0-429-018	1720-1780 N. 20th	D10	994	X102	750
02-07.0-429-018	1720-1780 N. 20th	F10	1700	X103	1,200
02-18.0-215-022	1322 N. 18th	G2	1330	X104	2,700
02-18.0-215-022	1322 N. 18th	G1	624	X105	2,000

Plot XRF Data vs Lab Data



Plot Lab Data vs XRF Data



Appendix G

Statistical Evaluation Sheets

East St. Louis Awning, Site 160

XRF data.xls

(A)	B	C	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
124	282	146	140	176	157	186	119	114	41	201
95	282	123	120	149	126	159	47	89	129	164
54	183	138	91	137	145	101	56	61	112	206
119	121	133	66	112	169	191	146	96	134	174
109	196	109	80	109	123	225	47	88	113	144
551	198	99	58	177	172	85	56	88	106	134
459	121	107	429	123	197	54	287	76	125	215
109	54	115	60	460	163	297	457	39	79	439
551	45	97	260	58	78	104	150	53	94	359
459	85	43	113	140	160	107	163	41	104	151
109	223	34	127	85	438	394	290	67	155	218
302	63	61	132	115	86	470	219	79	60	330
189	53	34	61	74	90	95	173	52	137	253
315	200	47	154	138	217		325	91	98	
224	33	34	172		258	n=13	254	37	102	n=13
89	62	47	153	n=14	354		124	43	113	
156	140	34	135		123			34	123	
195	55	46			120		n=16	34	75	
447	181	133	n=17		230			119	74	
229	82	182						66	48	
146	83	149		n=19				39	97	
217	65	46						55	52	
325	103	55						49	214	
	68	76						61	340	
n=23	8	123						50	342	
	6	202						62	430	
	7	138						56	440	
	112	106						82	440	
	422	41						58	315	
	95	108						68	304	
	48	122						64	184	
	54	157						66	263	
	70	93						153	51	
	83	59						129	265	
		54						96	348	
	n=34	90						107	599	
		97						97	195	
		259						111	39	
		283						127	84	
		169						562	114	
		43							91	
		42						n=40	n=41	
		52								
		59								
		96								
		142								
		412								
		131								
		246								
		122								
		109								
		47								
		142								
		67								
		212								
		228								
		260								
		198								
		221								
		229								
		385								
		218								
		150								
		117								
		191								
		642								

UCL > 400 = Additional Clean up Required

NONE OF THIS DATA FAS THIS CRITERIA

RECEIVED
IEPA
MAY 30 2002
COLLINSVILLE OFFICE

n=66

N= Number of Sample Points per lot

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Statistics Column A

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-112-021

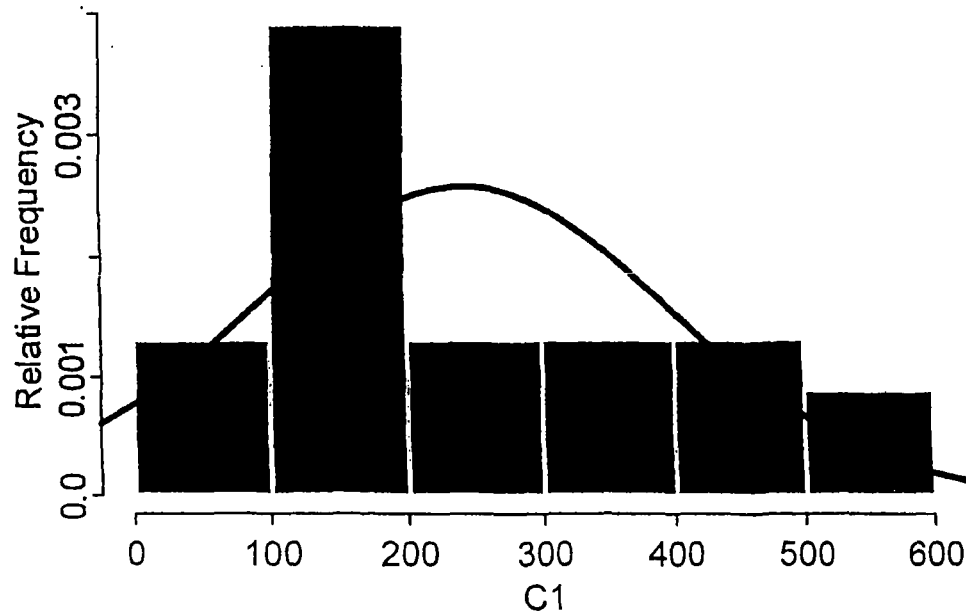
Name and Address: Vincent Harvey 419 Gray Blvd

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
538 A1					124						
539 A2					94						
540 A3					54						
541 A4					119						
542 B1					109						
543 C2					551						
544 D2					459						
545 E2					109						
546 E3					3.2						
547 F1					187						
548 F1					271						
549 F2					224						
550 F3					87						
551 F4					176						
552 F4					175						
553 G1					477						
554 G2					229						
555 G3					146						
556 G4					217						
557 G5					325						

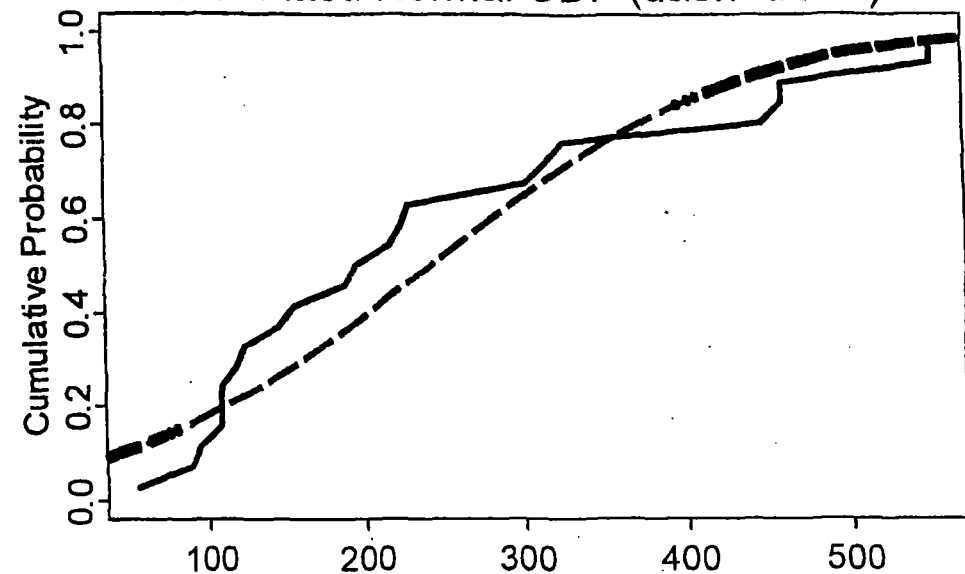
Results of Shapiro-Wilk GOF Test for C1 in XRF.Data

Column "A"

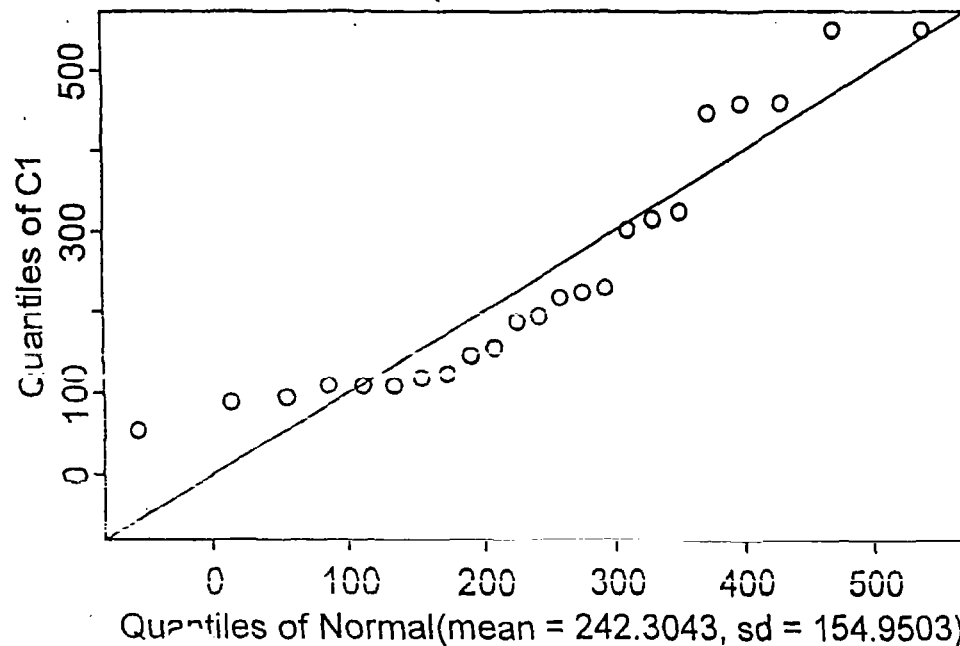
Histogram of Observed Data
with Fitted Normal Distribution



Empirical CDF for C1 (solid line)
with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Normal

Estimated Parameters:

mean = 242.3043
sd = 154.9503

Data:

C1 in XRF.Data

Sample Size:

23

Test Statistic:

W = 0.8770541

Test Statistic Parameter:

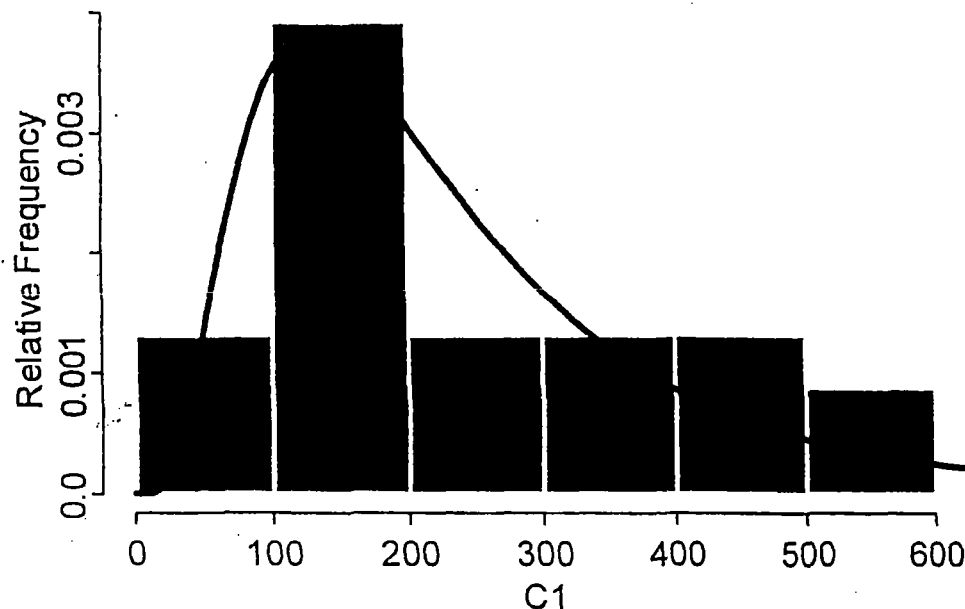
n = 23

P-value:

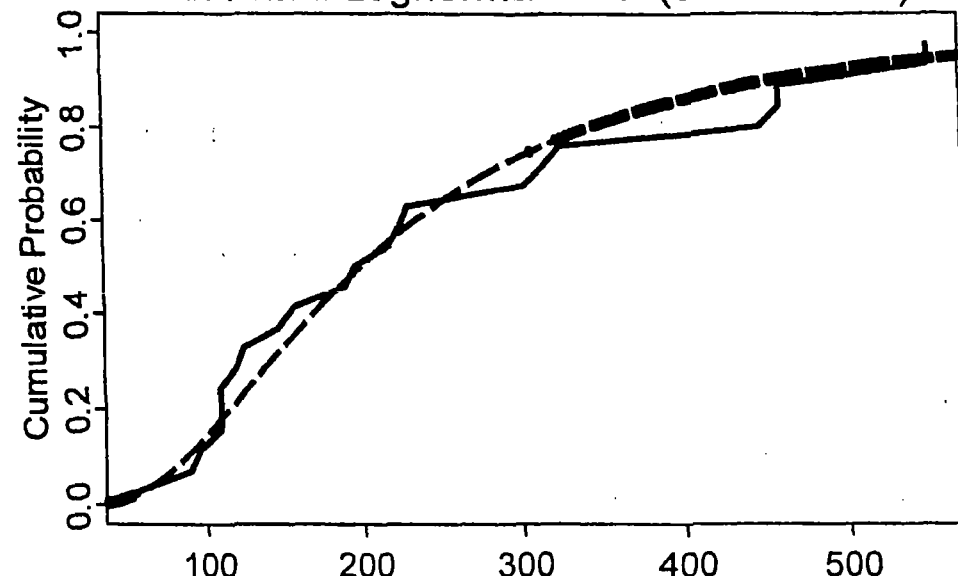
0.008768295

Reject Null: not normally
distributed

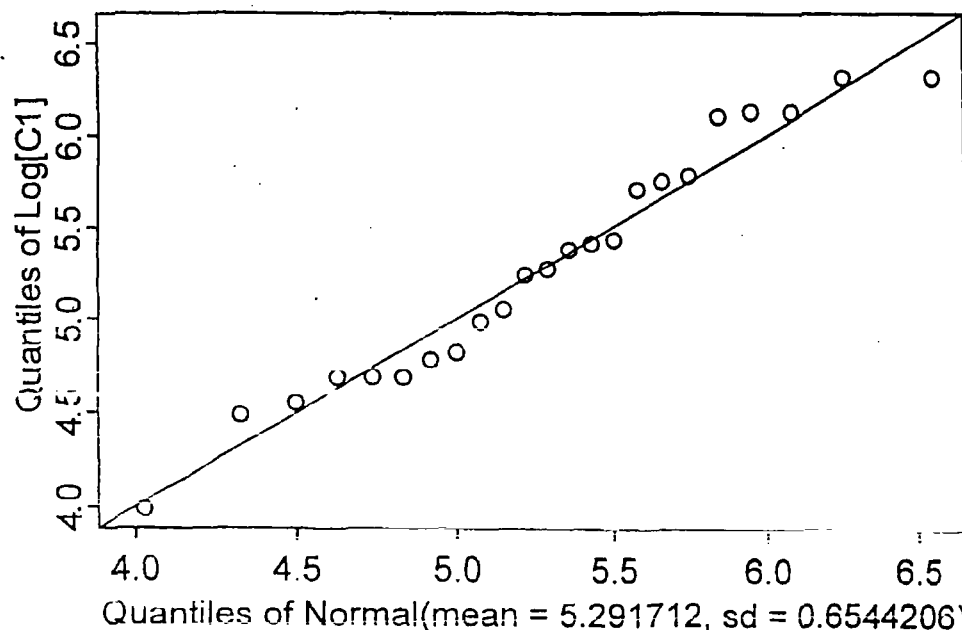
Histogram of Observed Data
with Fitted Lognormal Distribution



Empirical CDF for C1 (solid line)
with Fitted Lognormal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Lognormal

Estimated Parameters:

meanlog = 5.291712
sdlog = 0.6544206

Data:

C1 in XRF Data

Sample Size:

23

Test Statistic:

W = 0.9566671

Test Statistic Parameter:

n = 23

P-value:

0.3994764

Null accepted: lognormal
distribution

$\alpha = 0.05$

Excel
Column "A"

Results of Distribution Parameter Estimation

Assumed Distribution: Lognormal

Estimated Parameter(s): mean = 243.4284
cv = 0.7028359

Estimation Method: mvue

Data: C1 in XRF.Data

Sample Size: 23

Number NA/NaN/Inf's: 43

Confidence Interval for: mean

Confidence Interval Method: Land

Confidence Interval Type: upper

Confidence Level: 95%

Confidence Interval: LCL = 0
UCL = 330.8009

Statistics Column



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-003

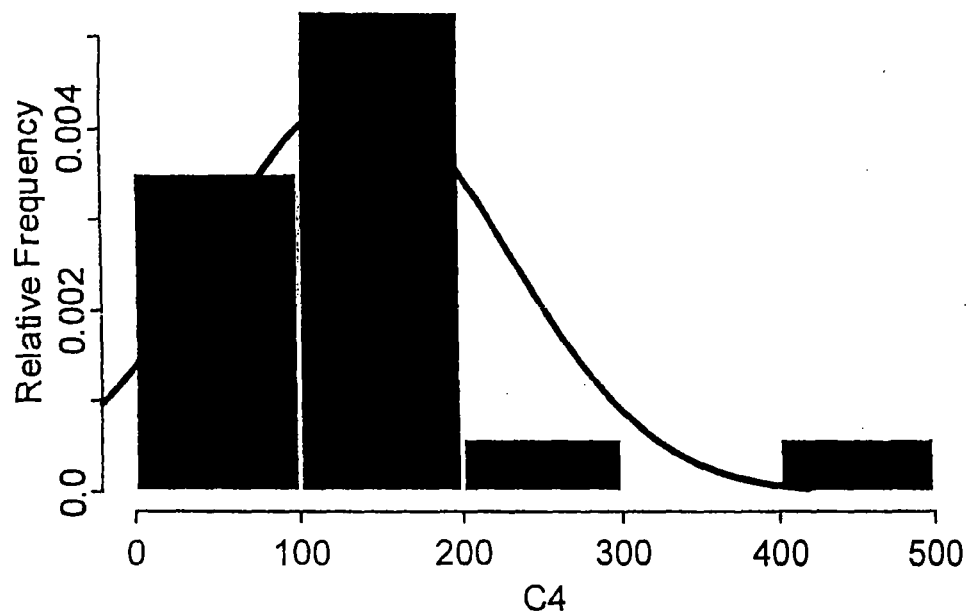
Name and Address: James Perry 428 Gray Blvd

XRF

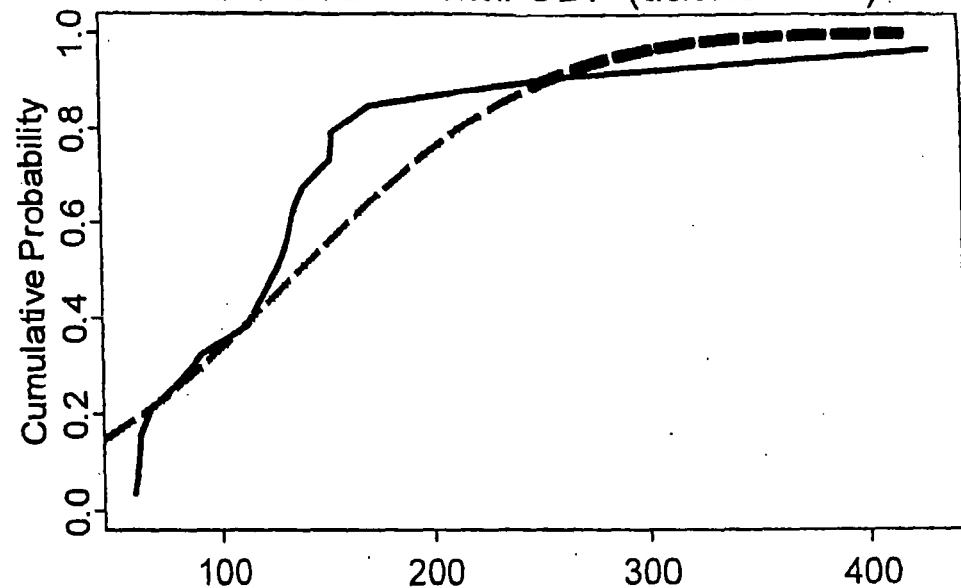
20

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
A1					140						
A2					120						
A3					91						
B1					66						
B2					80						
B3					58						
E3					48						
F3					60						
F4					260						
G1					113						
G2					127						
G3					132						
G4					61						
H1					154						
H2					172						
H3					153						
H4					135						

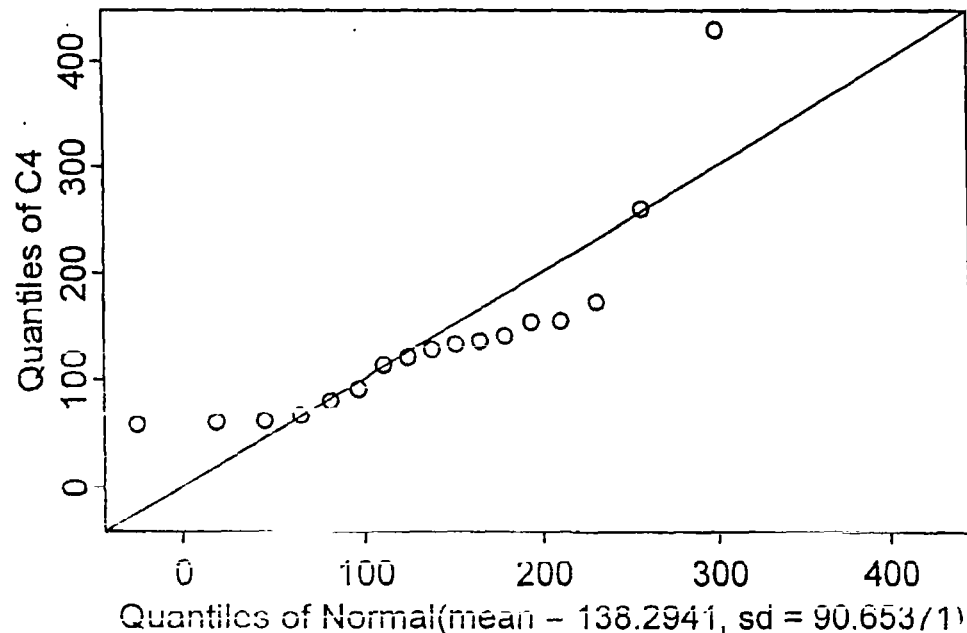
Histogram of Observed Data
with Fitted Normal Distribution



Empirical CDF for C4 (solid line)
with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Normal

Estimated Parameters:

mean = 138.2941
sd = 90.6537

Data:

C4 in XRF.Data

Sample Size:

1

Test Statistic:

W = 0.749578

Test Statistic Parameter:

n = 1

P-value:

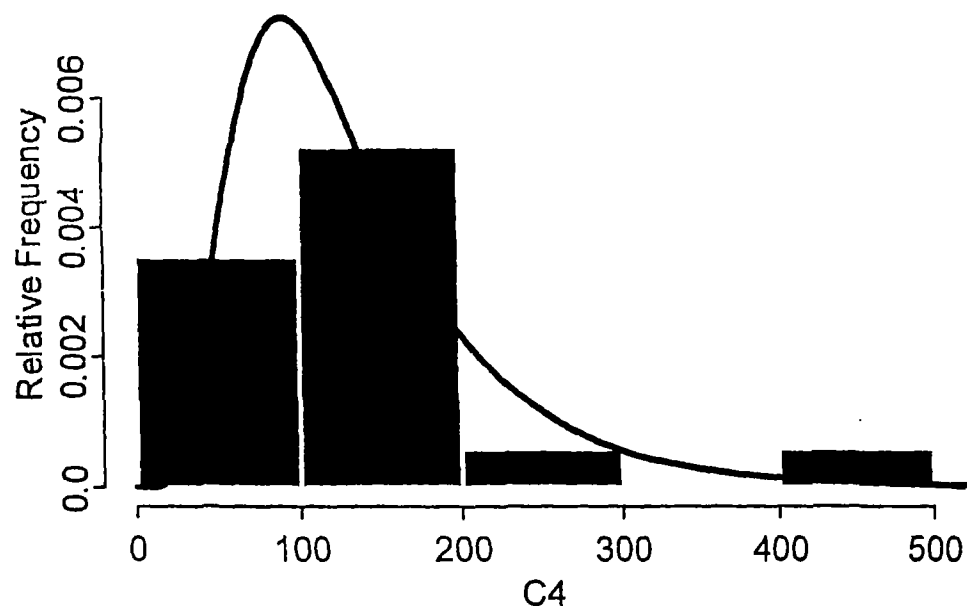
4.468487e-

Reject Null: not normally
distributed

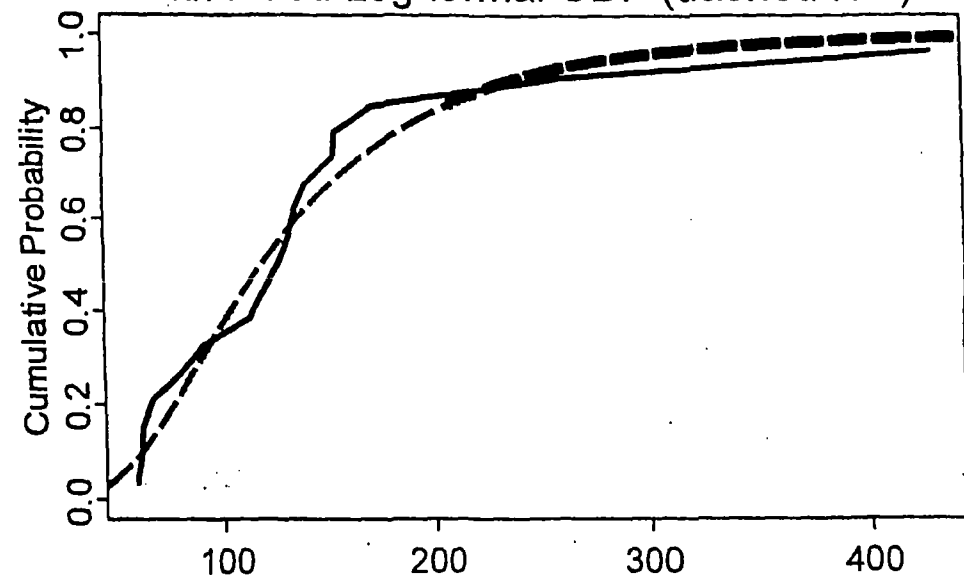
Results of Shapiro-Wilk GOF Test for C4 in XRF.Data

Column "D"

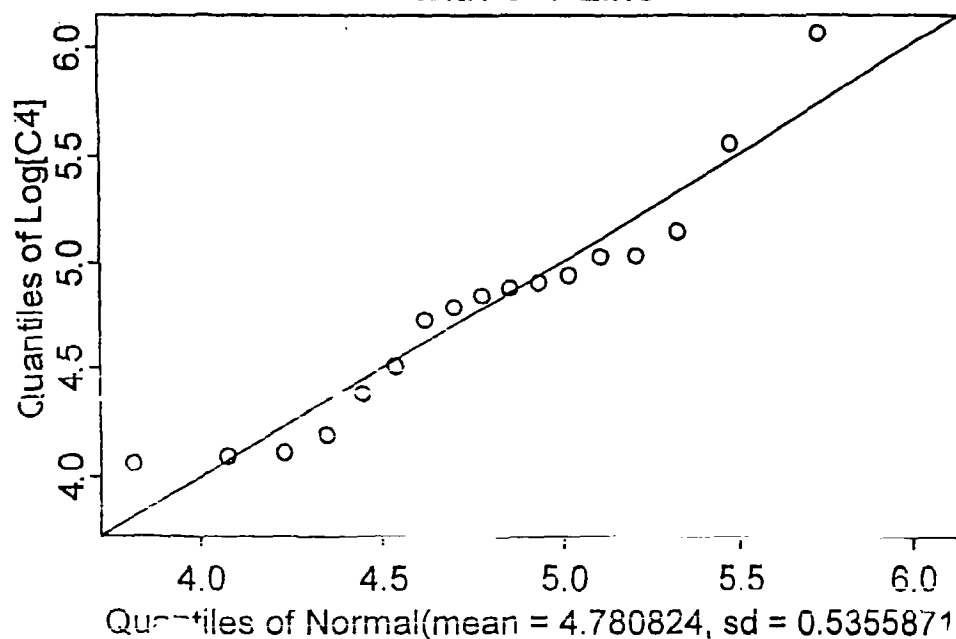
Histogram of Observed Data with Fitted Lognormal Distribution



Empirical CDF for C4 (solid line) with Fitted Lognormal CDF (dashed line)



Quantile-Quantile Plot with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized Distribution:

Lognormal

Estimated Parameters:

meanlog = 4.780824
sdlog = 0.5355871

Data:

C4 in XRF.Data

Sample Size:

17

Test Statistic:

W = 0.9321123

Test Statistic Parameter:

n = 17

P-value:

0.2360465

Accept Null: lognormally distributed

Excel
Column "D"

Results of Distribution Parameter Estimation

Assumed Distribution:	Lognormal
Estimated Parameter(s):	mean = 136.2947 cv = 0.5576716
Estimation Method:	mvue
Data:	<u>C4 in XRF.Data</u>
Sample Size:	17
Number NA/NaN/Inf's:	49
Confidence Interval for:	mean
Confidence Interval Method:	Land
Confidence Interval Type:	<u>upper</u>
Confidence Level:	<u>95%</u>
Confidence Interval:	LCL = 0 <u>UCL = 181.559</u>

Statistics Column "E"

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-005

Name and Address: Greta Stinson 426 Gray Blvd

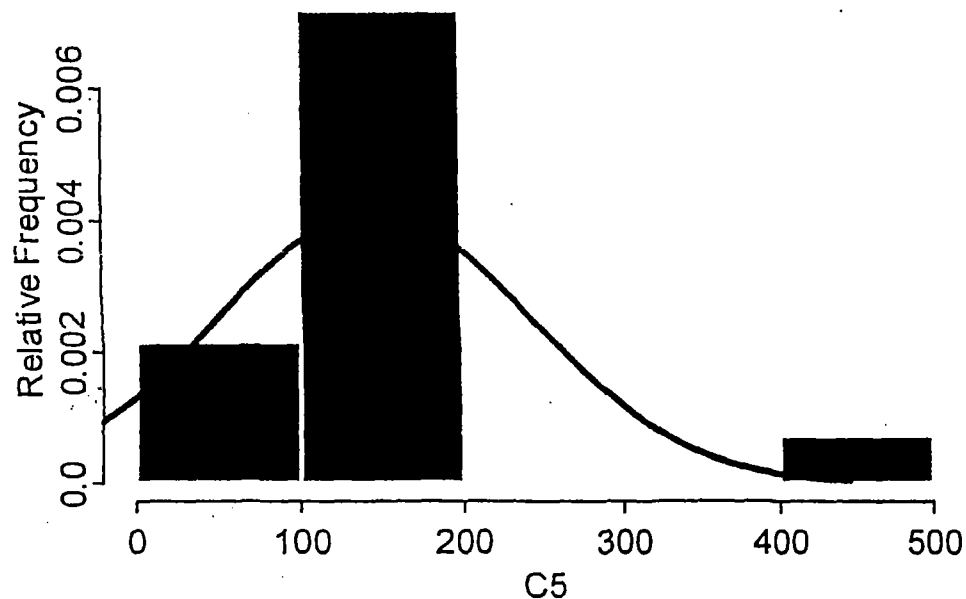
[illegible]

Discrepancy
45

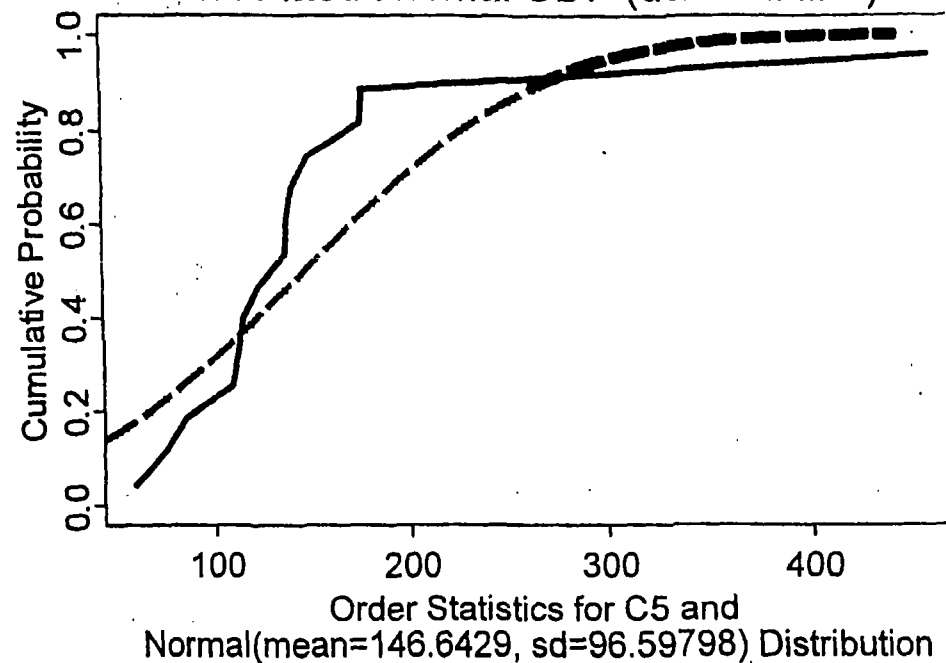
Results of Shapiro-Wilk GOF Test for C5 in XRF.Data

Column

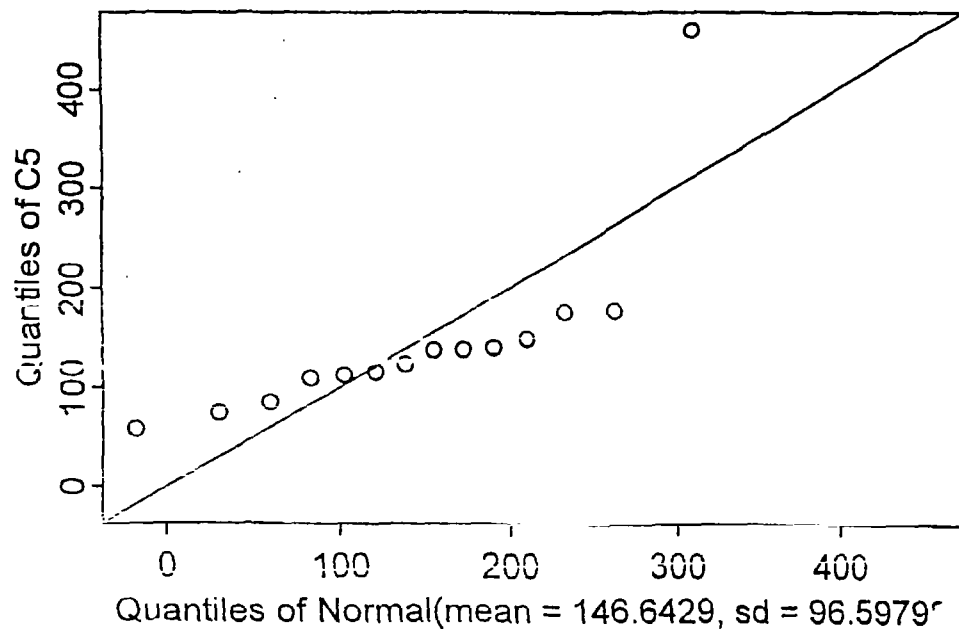
Histogram of Observed Data
with Fitted Normal Distribution



Empirical CDF for C5 (solid line)
with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Normal

Estimated Parameters:

mean = 146.6429
sd = 96.5979

Data:

C5 in XRF.Data

Sample Size:

1

Test Statistic:

W = 0.647678

Test Statistic Parameter:

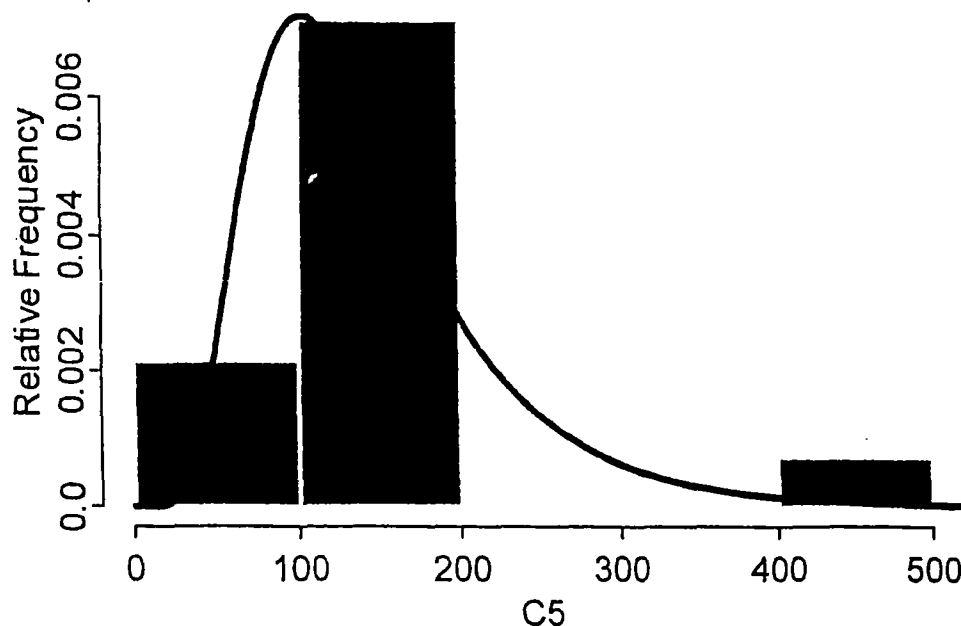
n = 1

P-value:

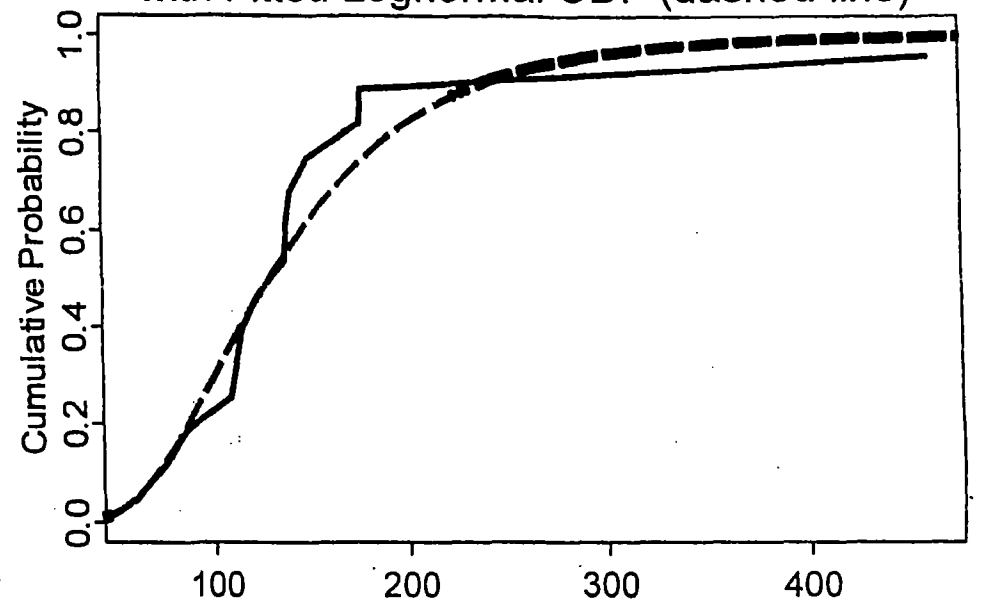
1.115973e-

Reject Null: not normally
distributed

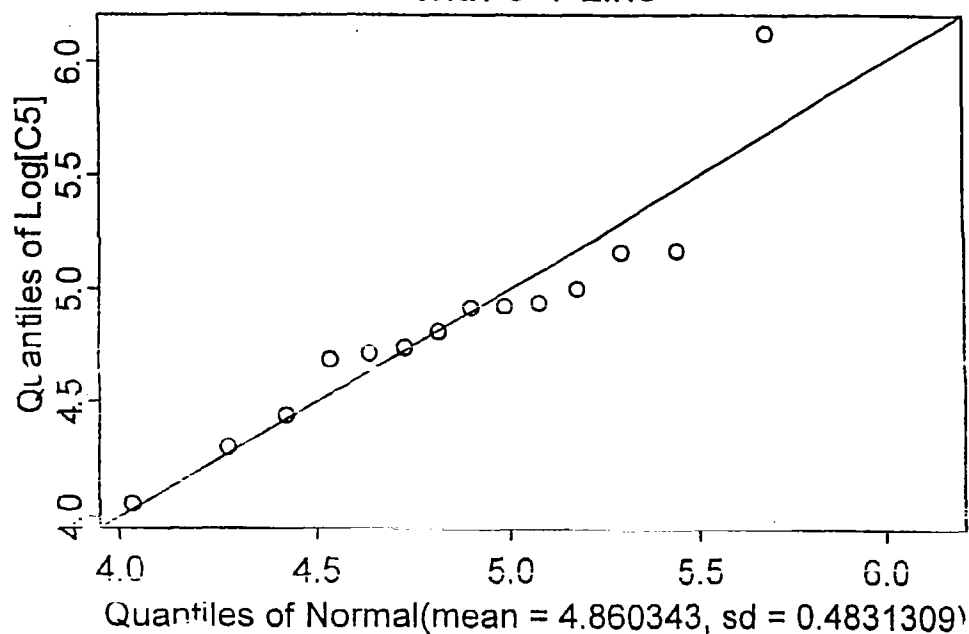
Histogram of Observed Data
with Fitted Lognormal Distribution



Empirical CDF for C5 (solid line)
with Fitted Lognormal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Lognormal

Estimated Parameters:

meanlog = 4.860343
sdlog = 0.4831309

Data:

C5 in XRF.Data

Sample Size:

14

Test Statistic:

W = 0.9029925

Test Statistic Parameter:

n = 14

P-value:

0.1246522

Accept Null: Lognormally
distributed

Excel
Column "E"

Results of Distribution Parameter Estimation

Assumed Distribution: Lognormal

Estimated Parameter(s): mean = 143.7312
cv = 0.4969713

Estimation Method: mvue

Data: C5 in XRF.Data

Sample Size: 14

Number NA/NaN/Inf's: 52

Confidence Interval for: mean

Confidence Interval Method: Land

Confidence Interval Type: upper

Confidence Level: 95%

Confidence Interval: LCL = 0
UCL = 191.3996

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19-0-204-036

Name and Address:

Gray Blvd.

XRF

	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
78	A1					157						
79	A2					126						
80	A3					145						
81	A4					169						
82	A5					123						
83	A6					112						
84	A7					147						
85	A10					163						
86	B1					28						
87	B2					100						
88	B3					128						
89	B4					81						
90	B10					10						
91	B11					117						
92	C1					218						
93	C2					357						
94	C9					123						
95	C10					120						
96	C11					230						

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-005

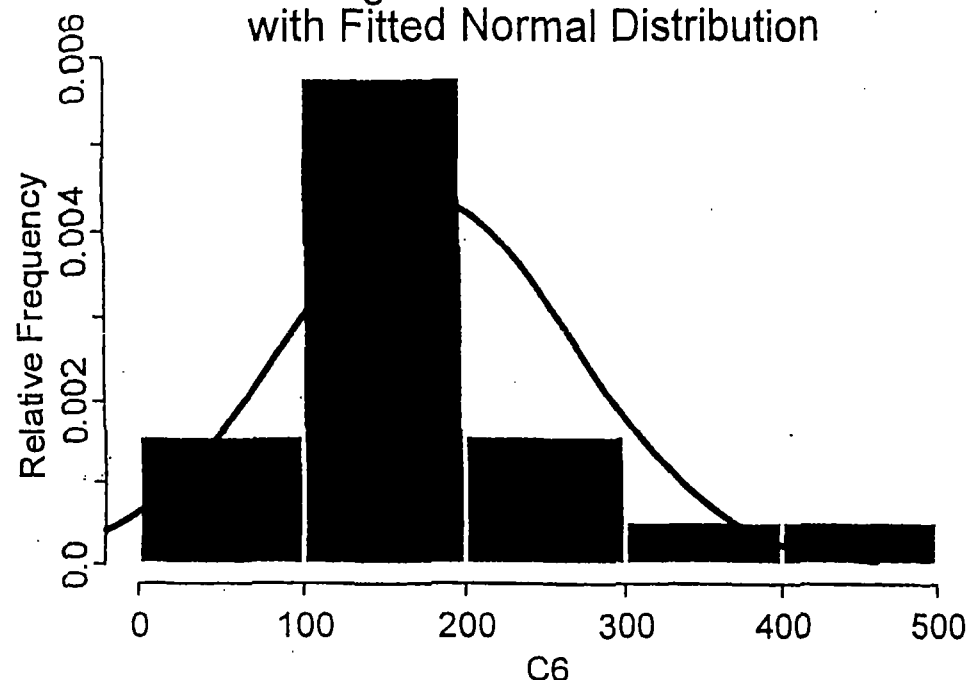
Name and Address: Greta Stinson 426 Gray Blvd

[illegible]

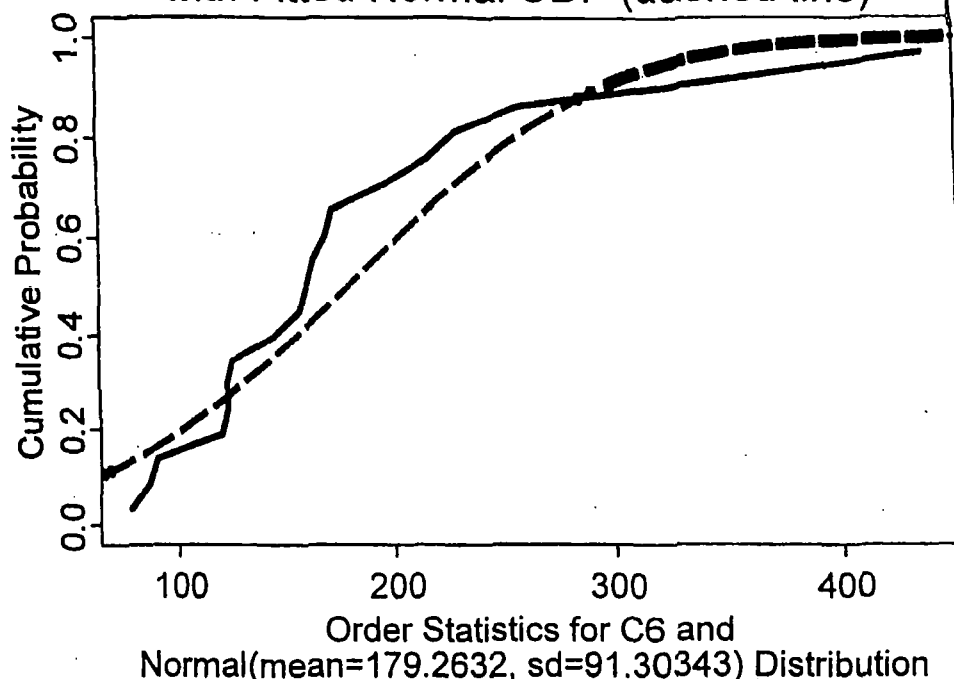
Results of Shapiro-Wilk GOF Test for C6 in XRF.Data

Column F

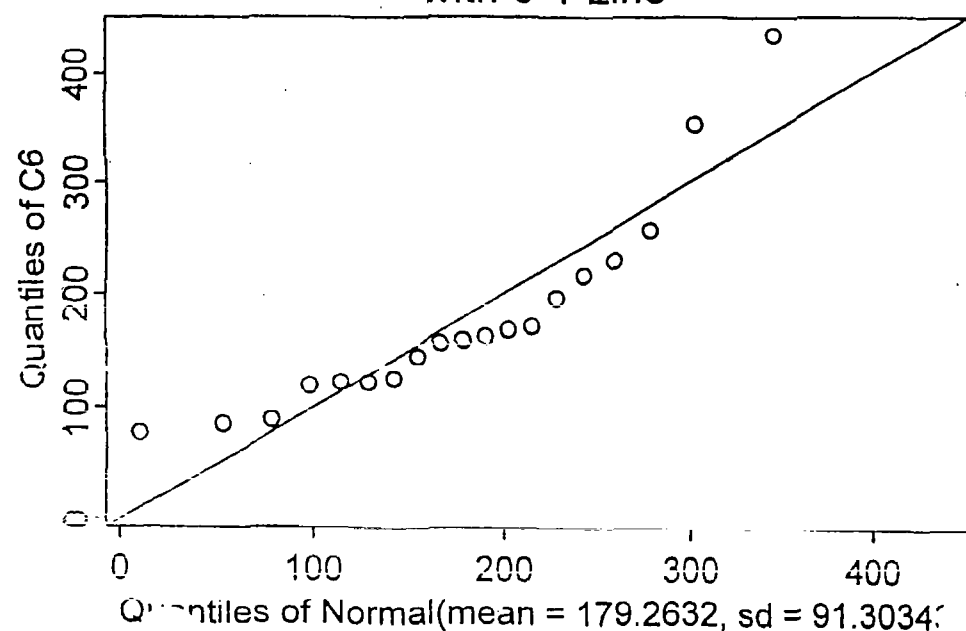
Histogram of Observed Data
with Fitted Normal Distribution



Empirical CDF for C6 (solid line)
with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line

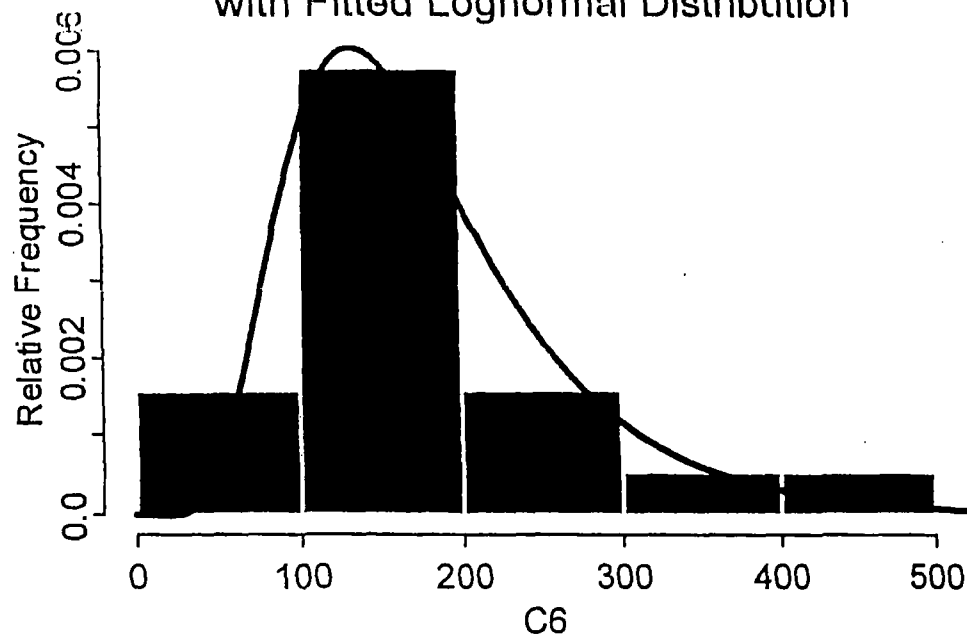


Results of Shapiro-Wilk GOF

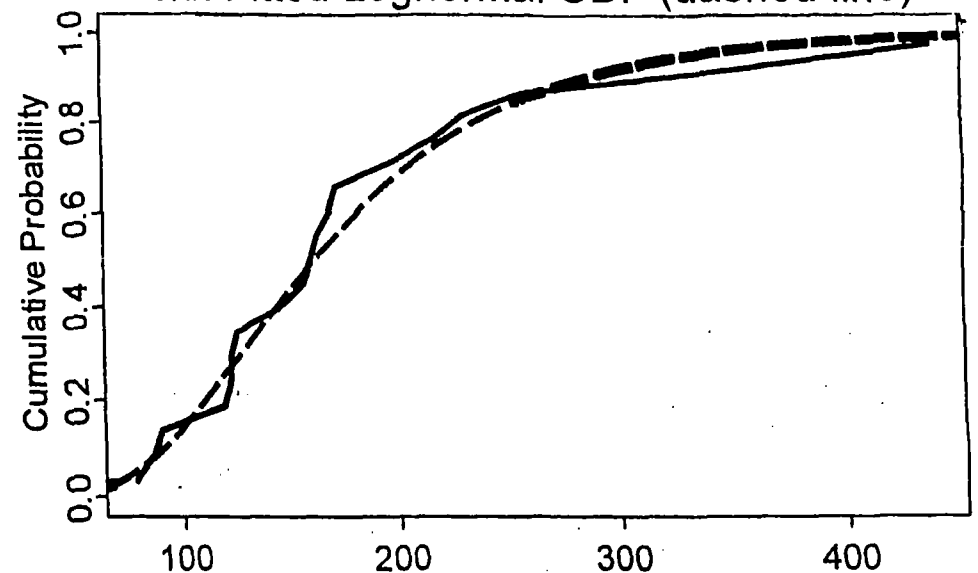
Hypothesized Distribution:	Normal
Estimated Parameters:	mean = 179.2632 sd = 91.30343
Data:	C6 in XRF.Data
Sample Size:	1
Test Statistic:	W = 0.844539
Test Statistic Parameter:	n = 1
P-value:	0.0054743

Reject Null: not normally distributed

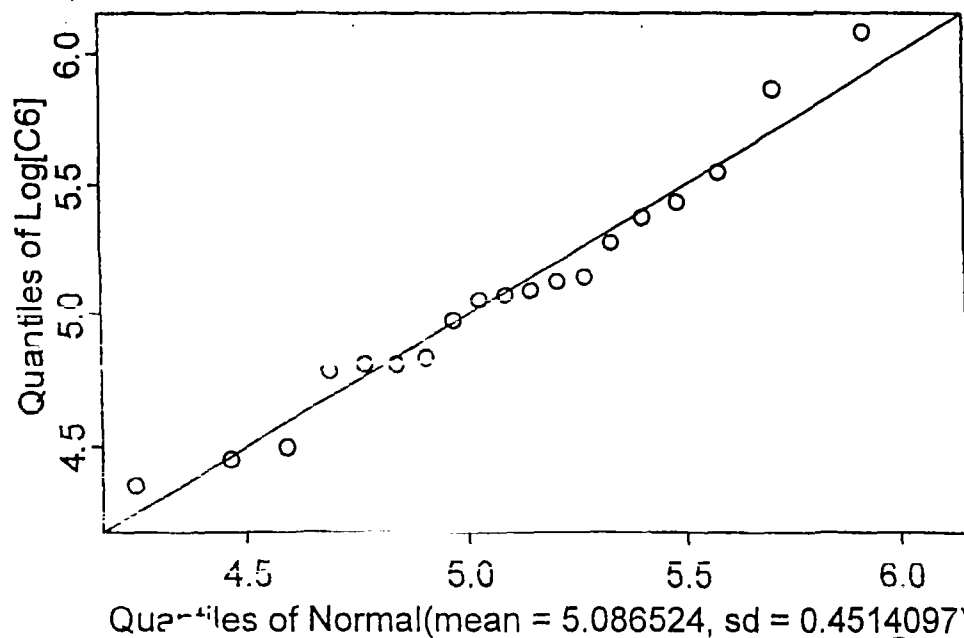
Histogram of Observed Data
with Fitted Lognormal Distribution



Empirical CDF for C6 (solid line)
with Fitted Lognormal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Lognormal

Estimated Parameters:

meanlog = 5.086524
sdlog = 0.4514097

Data:

C6 in XRF.Data

Sample Size:

19

Test Statistic:

W = 0.9662425

Test Statistic Parameter:

n = 19

P-value:

0.6996048

Accept Null: Lognormally
distributed

xxxx
Column "F"

EnvironmentalStats for S-PLUS:
Copyright 1995-2002 Steven P. Millard, Ph.D.
Version 2.0 Release 1 for Microsoft Windows : 2002

Results of Distribution Parameter Estimation

Assumed Distribution: Lognormal

Estimated Parameter(s): mean = 178.143
cv = 0.4656203

Estimation Method: mvue

Data: C6 in XRF.Data

Sample Size: 19

Number NA/NaN/Inf's: 47

Confidence Interval for: mean

Confidence Interval Method: Land

Confidence Interval Type: upper

Confidence Level: 95%

Confidence Interval: LCL = 0
UCL = 220.8559

BODINE ENVIRONMENTAL SERVICES, INC.

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Job Description: East Saint Louis Awning, Site #160

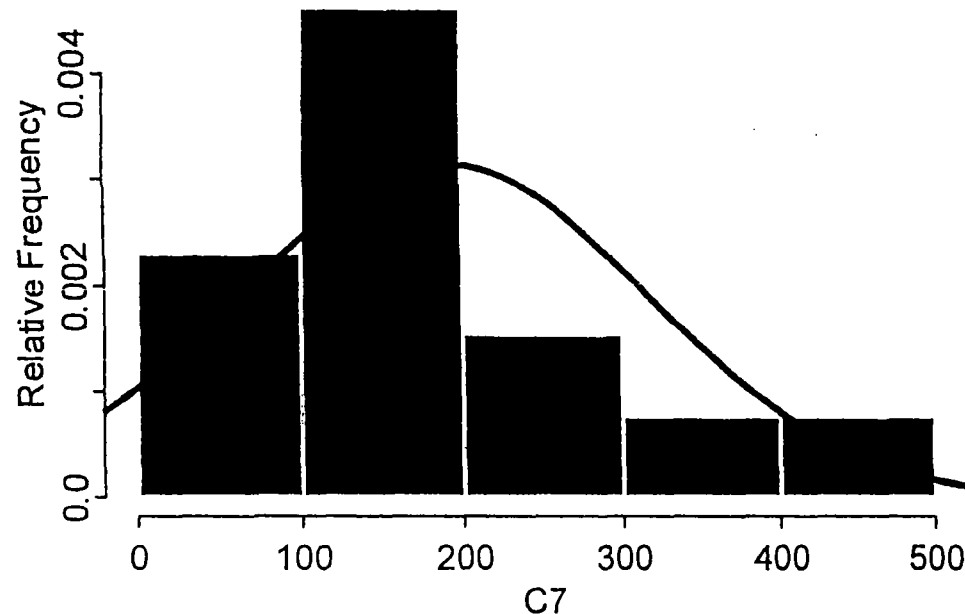
LPC#: 1630455241

Name and Address: Amos McFarland 424 Gray Blvd

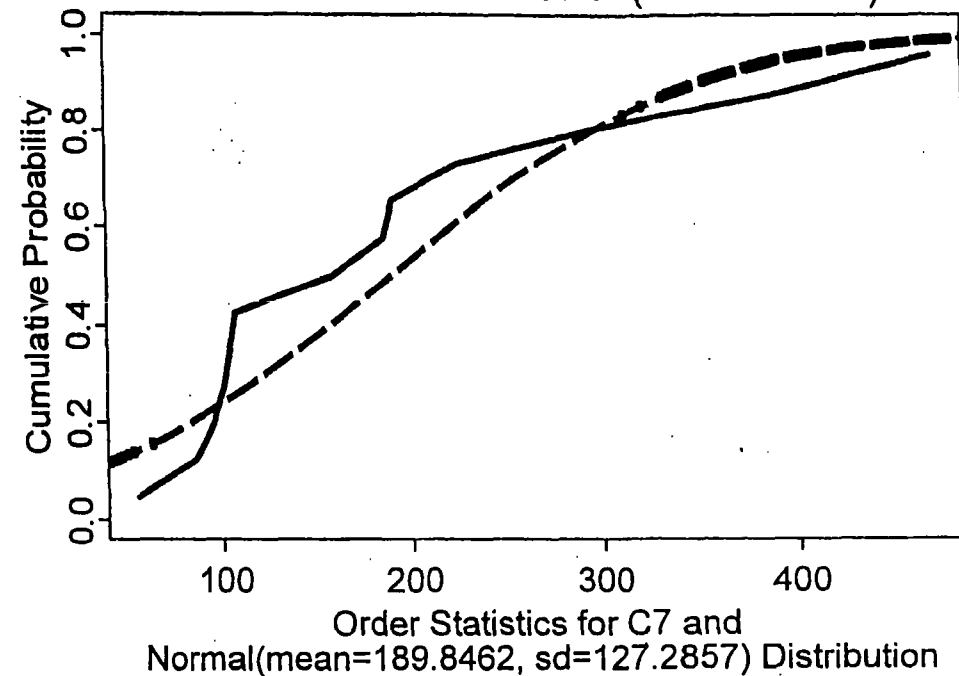
[illegible]

Discre

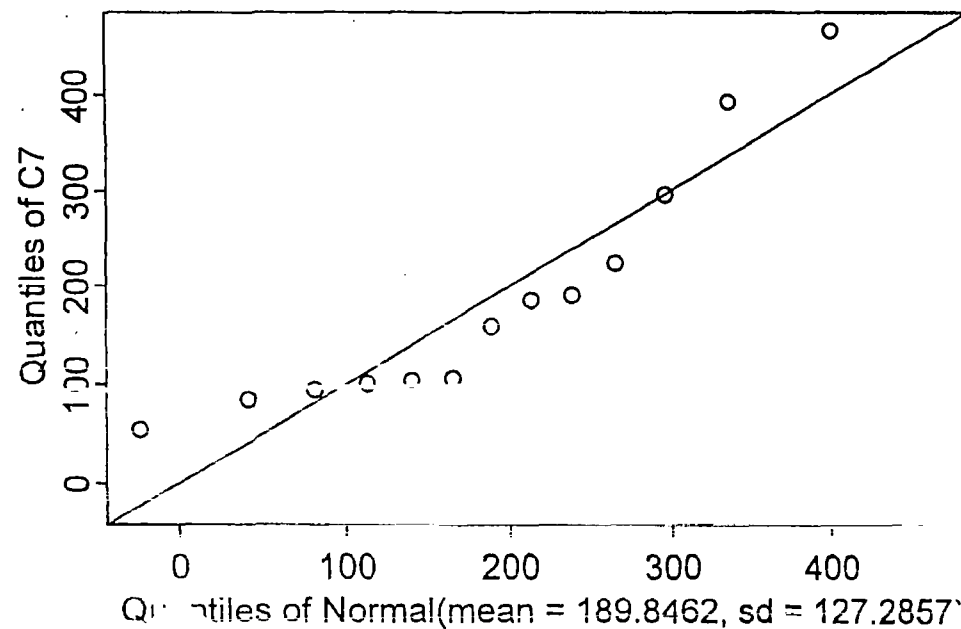
Histogram of Observed Data
with Fitted Normal Distribution



Empirical CDF for C7 (solid line)
with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



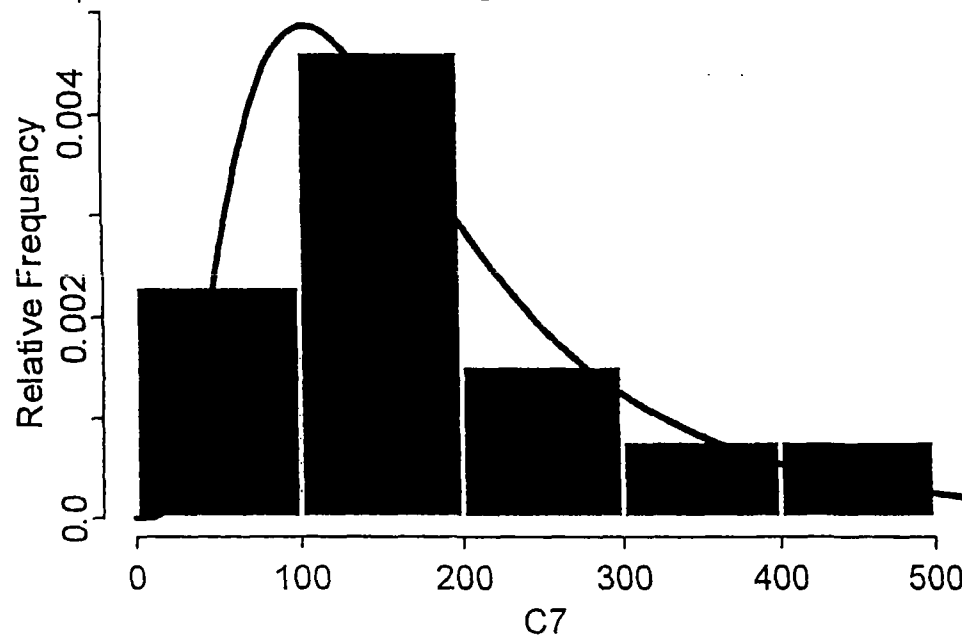
Results of Shapiro-Wilk GOF

Hypothesized Distribution:	Normal
Estimated Parameters:	mean = 189.8462 sd = 127.2857
Data:	C7 in XRF.Data
Sample Size:	13
Test Statistic:	W = 0.8617707
Test Statistic Parameter:	n = 13
P-value:	0.04065408

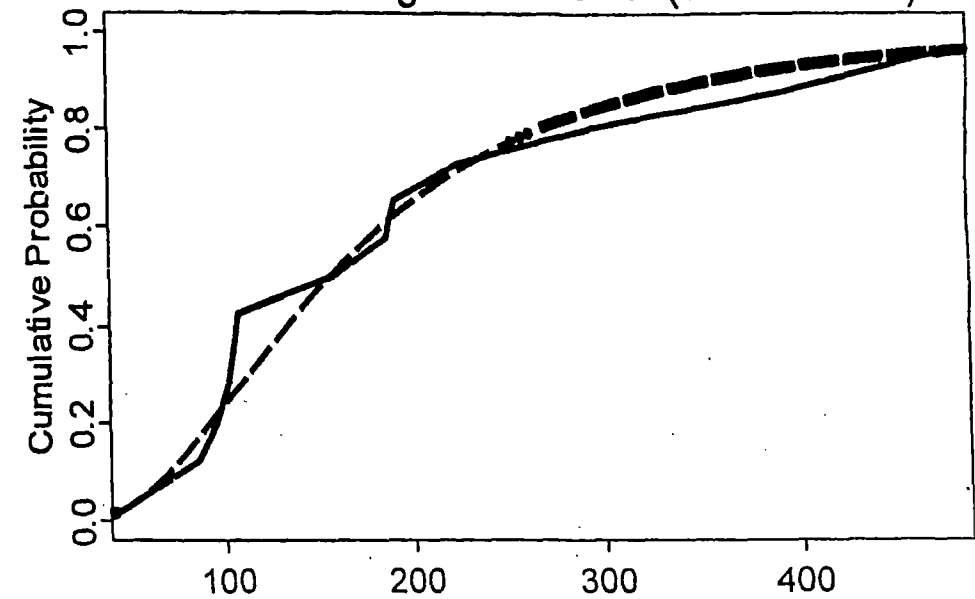
Reject Null: not normally distributed

$$\alpha = 0.05$$

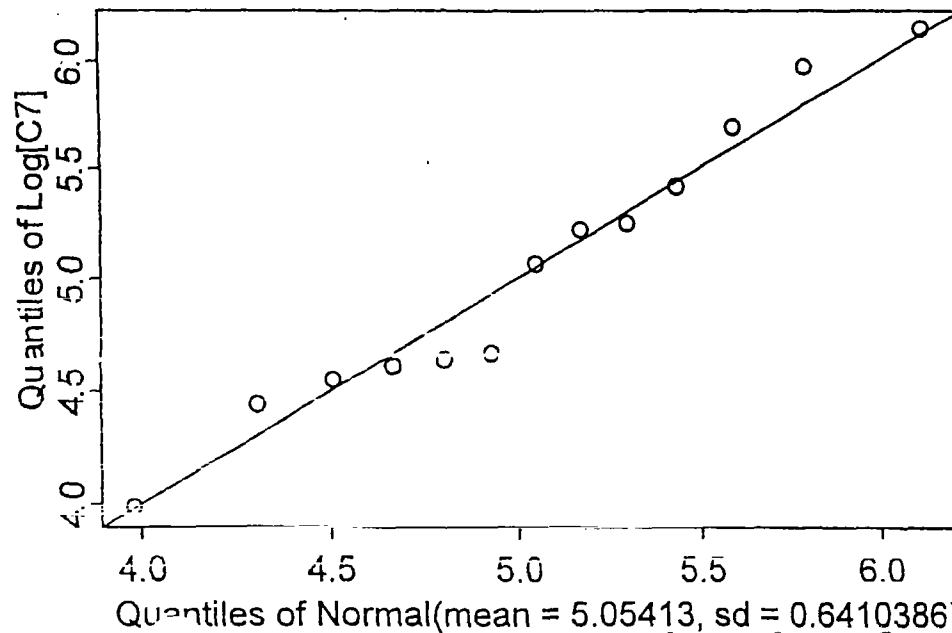
Histogram of Observed Data
with Fitted Lognormal Distribution



Empirical CDF for C7 (solid line)
with Fitted Lognormal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Lognormal

Estimated Parameters:

meanlog = 5.05413
sdlog = 0.6410386

Data:

C7 in XRF.Data

Sample Size:

13

Test Statistic:

W = 0.9619023

Test Statistic Parameter:

n = 13

P-value:

0.782749

Accept Null: Lognormally
distributed

under
Column "G"

Results of Distribution Parameter Estimation -----

Assumed Distribution:	Lognormal
Estimated Parameter(s):	mean = 188.9154 cv = 0.670799
Estimation Method:	mvue
Data:	<u>C7 in XRF.Data</u>
Sample Size:	13
Number NA/NaN/Inf's:	53
Confidence Interval for:	mean
Confidence Interval Method:	Land
Confidence Interval Type:	<u>upper</u>
Confidence Level:	<u>95%</u>
Confidence Interval:	LCL = 0 <u>UCL = 293.9069</u>

Statistics Column "H"

BODINE ENVIRONMENTAL SERVICES, INC.
Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-020

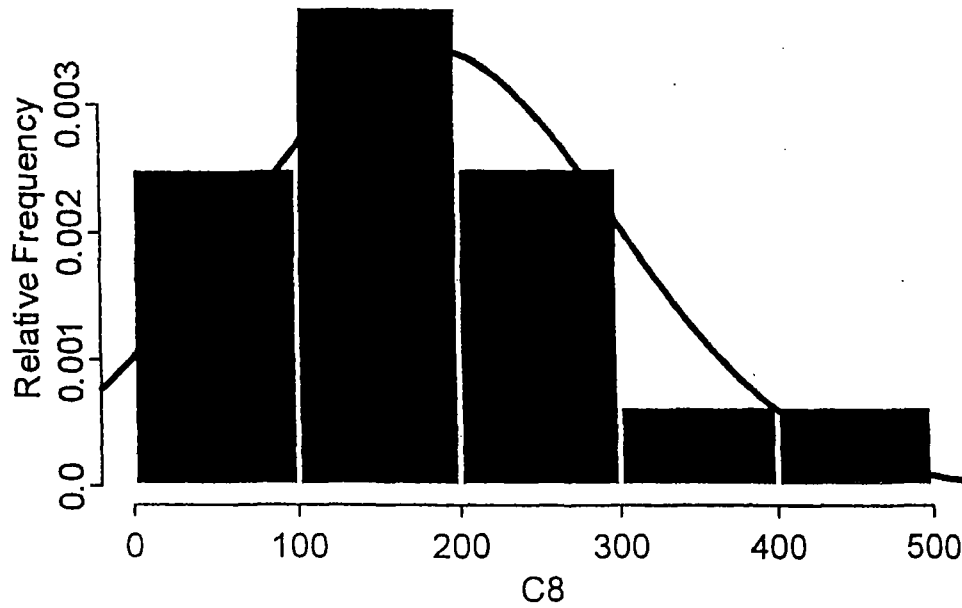
Name and Address: FARRIES EXCEL - 560 GRAY BLVD.

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
21 A2					119						
22 A4					47						
23 A5					55.8						
24 B2					146						
25 B4					47.2						
26 B5					56.1						
27 E2					28.7						
28 E3					45.7						
29 F2					150						
30 F3					163						
31 G2					290						
32 G3					209						
33 G4					173						
34 H3					325						
35 H4					254						
36 H5					124						

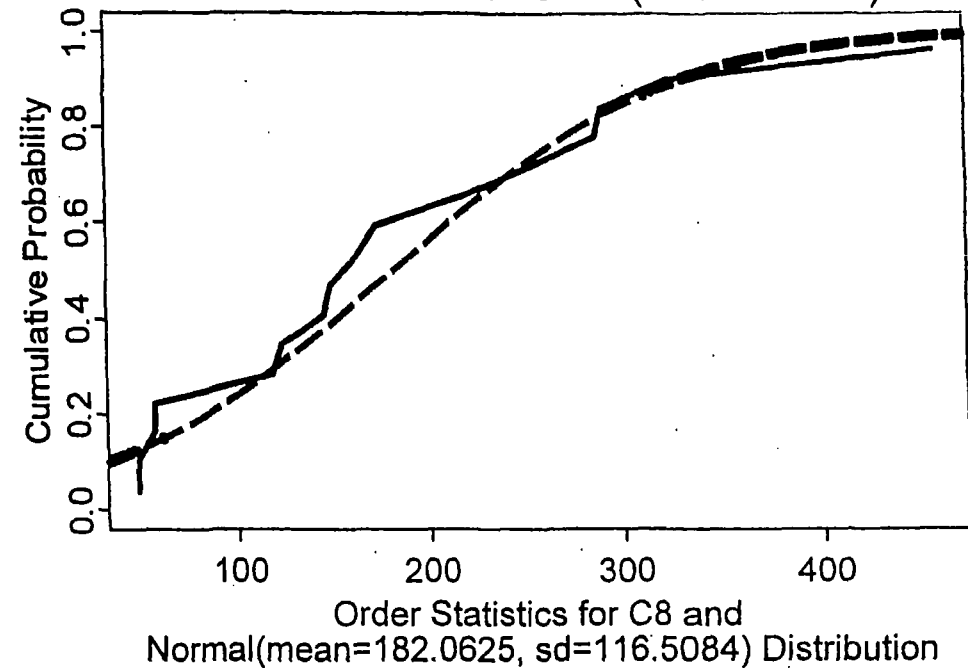
Results of Shapiro-Wilk GOF Test for C8 in XRF.Data

Excel
Column "H"

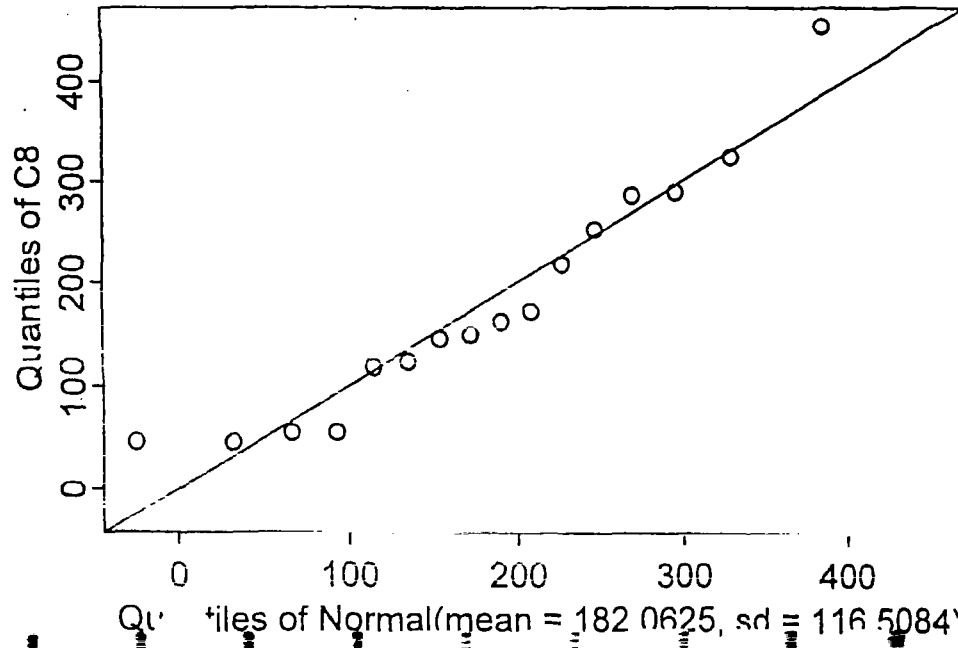
Histogram of Observed Data
with Fitted Normal Distribution



Empirical CDF for C8 (solid line)
with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Normal

Estimated Parameters:

mean = 182.0625

sd = 116.5084

Data:

C8 in XRF.Data

Sample Size:

16

Test Statistic:

W = 0.9232209

Test Statistic Parameter:

n = 16

P-value:

0.1900362

Accept Null: normally distributed

Excel
Column "H"

Results of Distribution Parameter Estimation

Assumed Distribution: Normal

Estimated Parameter(s): mean = 182.0625
sd = 116.5084

Estimation Method: mvue

Data: C8 in XRF.Data

Sample Size: 16

Number NA/NaN/Inf's: 50

Confidence Interval for: mean

Confidence Interval Method: Exact

Confidence Interval Type: upper

Confidence Level: 95%

Confidence Interval: LCL = -Inf
UCL = 233.1238

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-031

Name and Address: Winfred Hogan 402 Gray Blvd

XRF	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
215	A2					114						
216	A3					89						
217	A4					61						
218	A5					96						
219	A6					88						
220	A7					88						
21220	B2					76						
222	B3					139						
223	B4					53						
224	B5					41						
225	B6					67						
226	B7					11						
227	E1					52						
228	E2					91						
229	E3					57						
230	E4					43						
231	E5					94						
232	E6					139						
233	E7					119						

discrepancy
224

Bodine Environmental Services, Inc. Job Number # 112025

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-031

Name and Address:

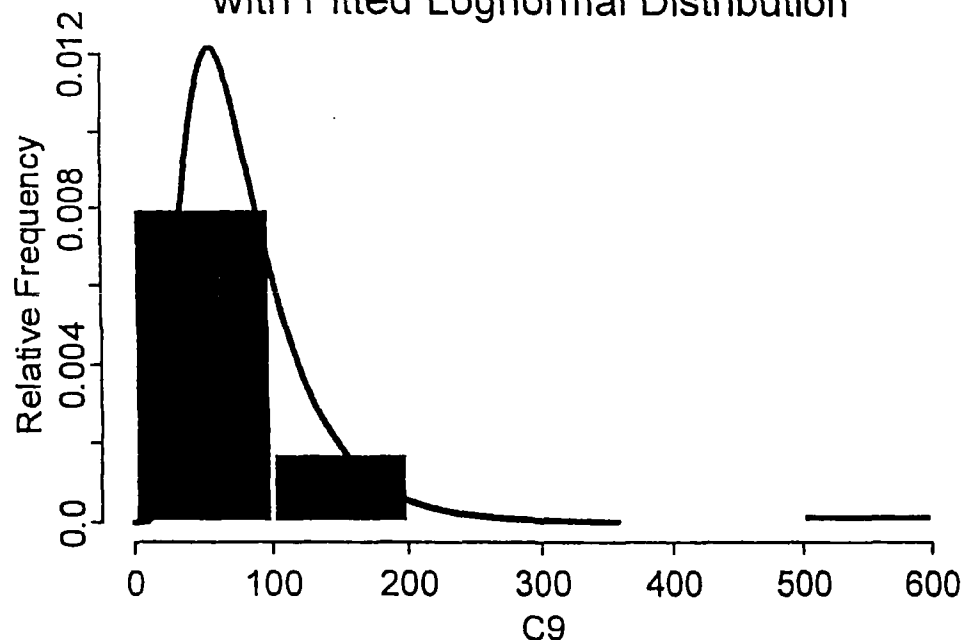
Location ID	Time	Pb	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
235		F1		66							
236		F2		439							
237		F3		455							
238		F4		449							
239		F5		61							
40		F6		50							
241		F7		62							
242		G1		56							
243		12		82							
244		3		58							
245		4		68							
246		5		64							
247		6		66							
248		G7		153							
249		H1		129							
250		H2		96							
251		H3		107							
252		H4		97							
253		H5		111							
254		H6		127							
255		H7		562							

Bodine Environmental Services, Inc. Job Number # 112025

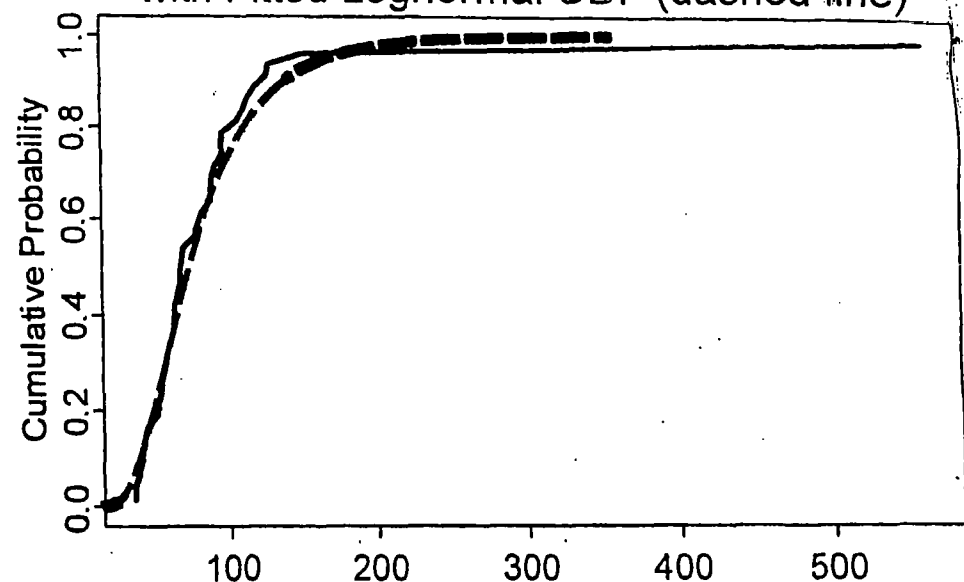
Results of Shapiro-Wilk GOF Test for C9 in XRF.Data

Excel
Column "1"

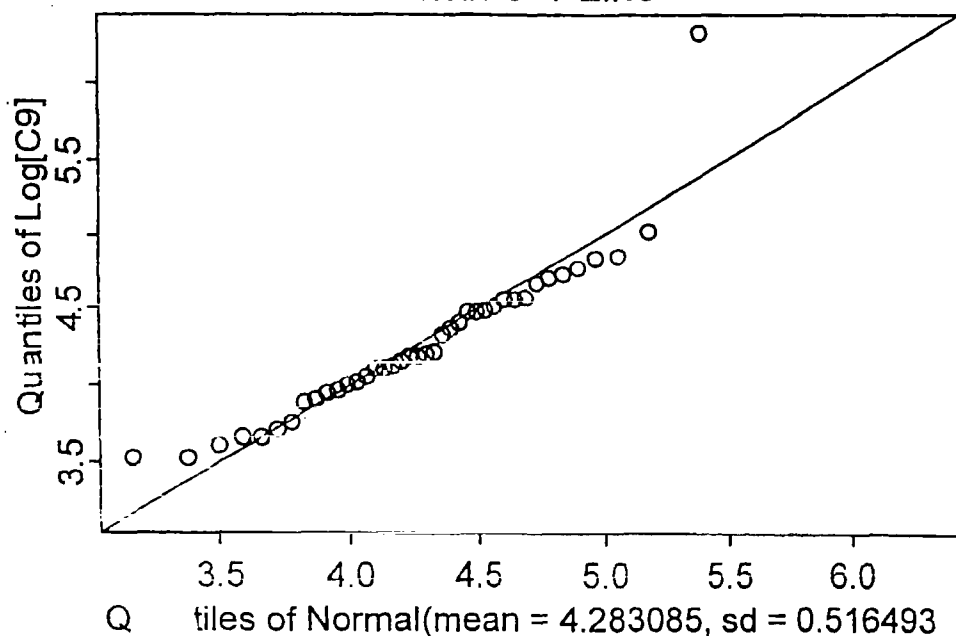
Histogram of Observed Data
with Fitted Lognormal Distribution



Empirical CDF for C9 (solid line)
with Fitted Lognormal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Lognormal

Estimated Parameters:

meanlog = 4.283085

sdlog = 0.5164939

Data:

C9 in XRF.Data

Sample Size:

40

Test Statistic:

W = 0.8948892

Test Statistic Parameter:

n = 40

P-value:

0.00136205

*Null rejected: not normally
distributed*

nonparametric test

C7

Once
Column "I"

*** Bootstrap Results ***

Call:

```
bootstrap(data = SDF1, statistic = mean(C9), B = 2000, seed = 47, trace = F, assign.frame1 =  
F, save.indices = F)
```

Number of Replications: 2000

Summary Statistics:

	Observed	Bias	Mean	SE
Param	86.47	-0.2469	86.23	12.76

BCa Percentiles:

numeric matrix: 1 rows, 4 columns.

	2.5%	5%	95%	97.5%
Param 70	91592	72.46648	124.9851	136.9664



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-009

Name and Address: Edgemont Development 416 Gray Blvd

YRF

	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
104	A1					41						
105	A2					129						
106	A3					112						
107	A4					134						
108	A5					113						
109	A6					106						
110	A7					125						
111	A8					79						
112	A10					94						
113	A11					107						
114	A13					135						
115	B1					60						
116	B2					137						
117	B3					98						
118	B4					102						
119	B5					113						
120	B6					123						
121	B7					75						
22	B8					74						



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: _____

Name and Address: _____

	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
123	610											
124	611											
125	612											
126	613											
127	614						340					
128	615						342					
129	616						430					
130	617						440					
131	618						440					
132	619						315					
133	620						304					
134	621						184					
135	622						263					
136	623						51					
137	624						265					
138	625						348					
139	626						599					
140	610						195					
141	612						39					

Bodine Environmental Services, Inc. Job Number # 112025

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number:

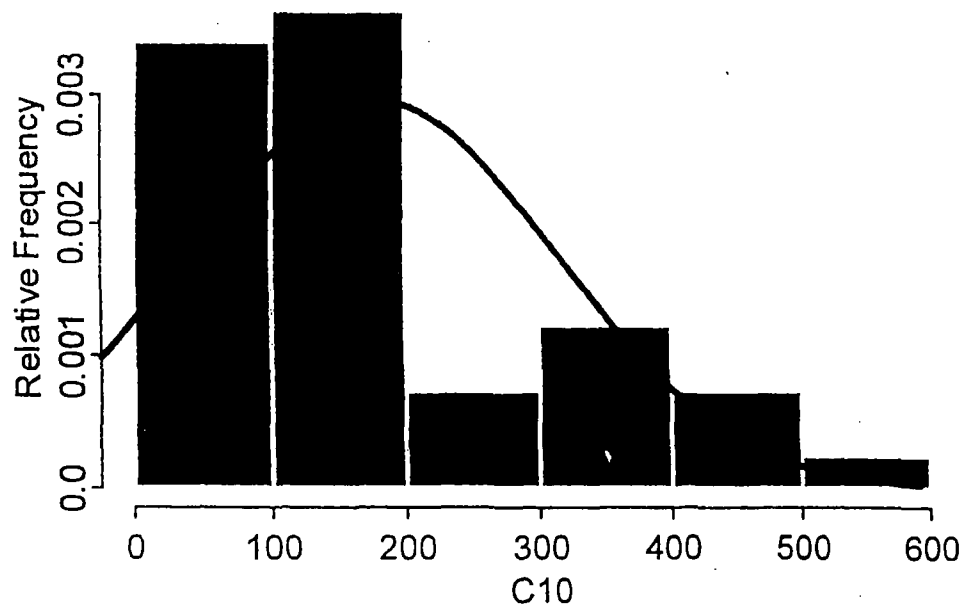
Name and Address:

[illegible]

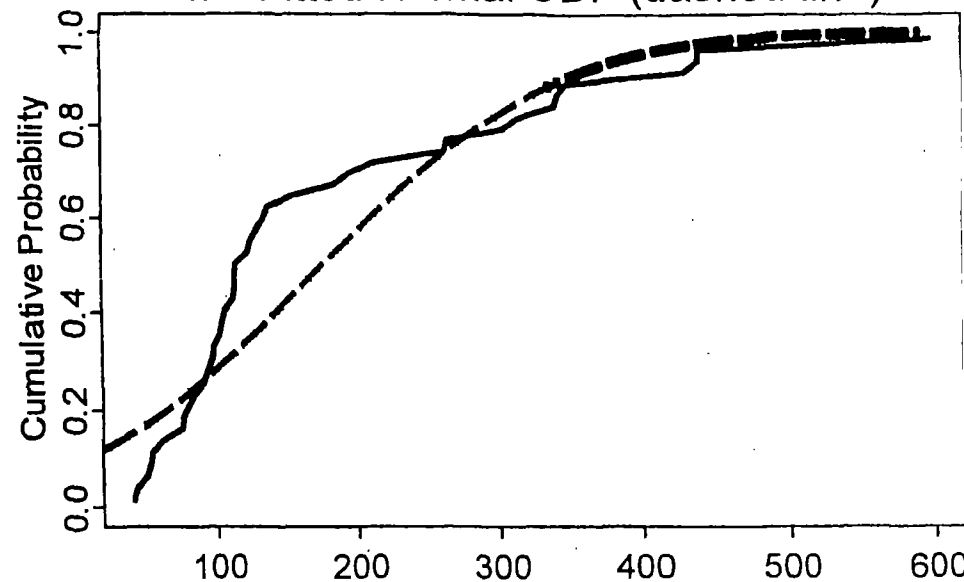
Bodine Environmental Services, Inc. Job Number # 112025

Results of Shapiro-Wilk GOF Test for C10 in XRF Data

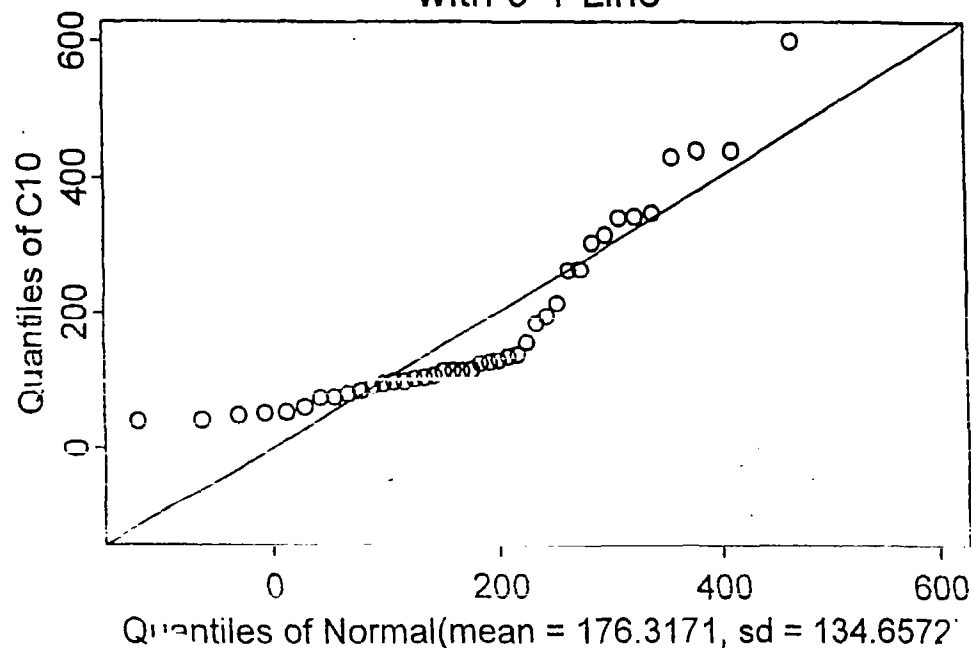
Histogram of Observed Data with Fitted Normal Distribution



Empirical CDF for C10 (solid line) with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized Distribution:

Normal

Estimated Parameters:

mean = 176.3171
sd = 134.6572

Data:

C10 in XRF Data

Sample Size:

4

Test Statistic:

W = 0.828623

Test Statistic Parameter:

n = 4

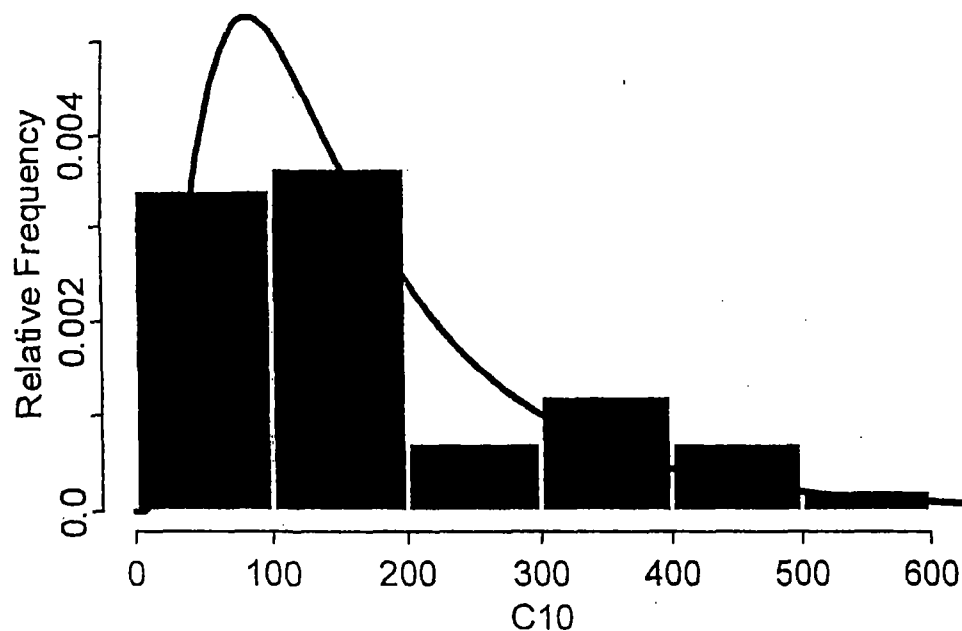
P-value:

2.329288e-

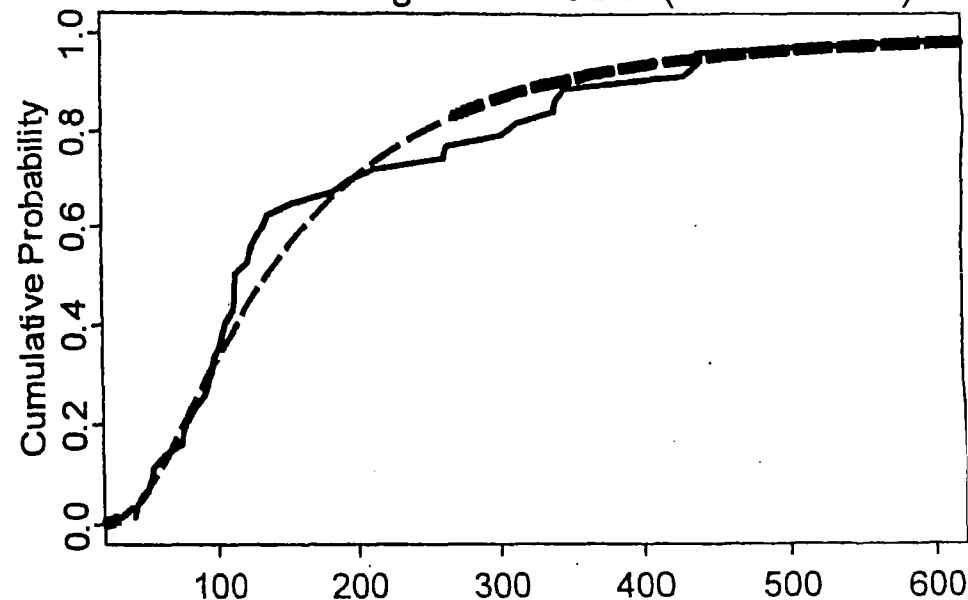
Null rejected: not normally distributed

Results of Shapiro-Wilk GOF Test for C10 in XRF.Data

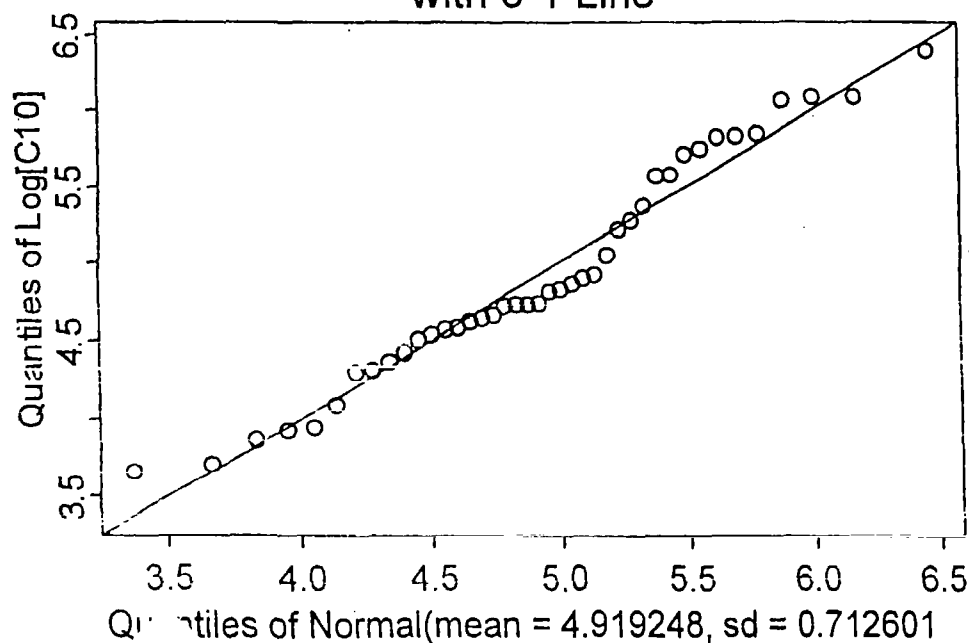
Histogram of Observed Data with Fitted Lognormal Distribution



Empirical CDF for C10 (solid line) with Fitted Lognormal CDF (dashed line)



Quantile-Quantile Plot with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized Distribution:

Lognormal

Estimated Parameters:

meanlog = 4.919248

sdlog = 0.7126011

Data:

C10 in XRF.Data

Sample Size:

41

Test Statistic:

W = 0.9606589

Test Statistic Parameter:

n = 41

P-value:

0.1658623

Null accepted: lognormal distributed

Excel
Column "J"

Results of Distribution Parameter Estimation

Assumed Distribution:	Lognormal
Estimated Parameter(s):	mean = 175.1279 cv = 0.790423
Estimation Method:	mvue
Data:	<u>C10 in XRF.Data</u>
Sample Size:	41
Number NA/NaN/Inf's:	25
Confidence Interval for:	mean
Confidence Interval Method:	Land
Confidence Interval Type:	<u>upper</u>
Confidence Level:	<u>95%</u>
Confidence Interval:	LCL = 0 <u>UCL = 222.7197</u>

Statistical Column 'K'

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency
Job Description: East Saint Louis Awning, Site #160 LPC#: 1630455241

Parcel Number: 02-18.0-420-016

Name and Address: SANDERS, JESSIE - 574 GRAY BLVD.

AWING #

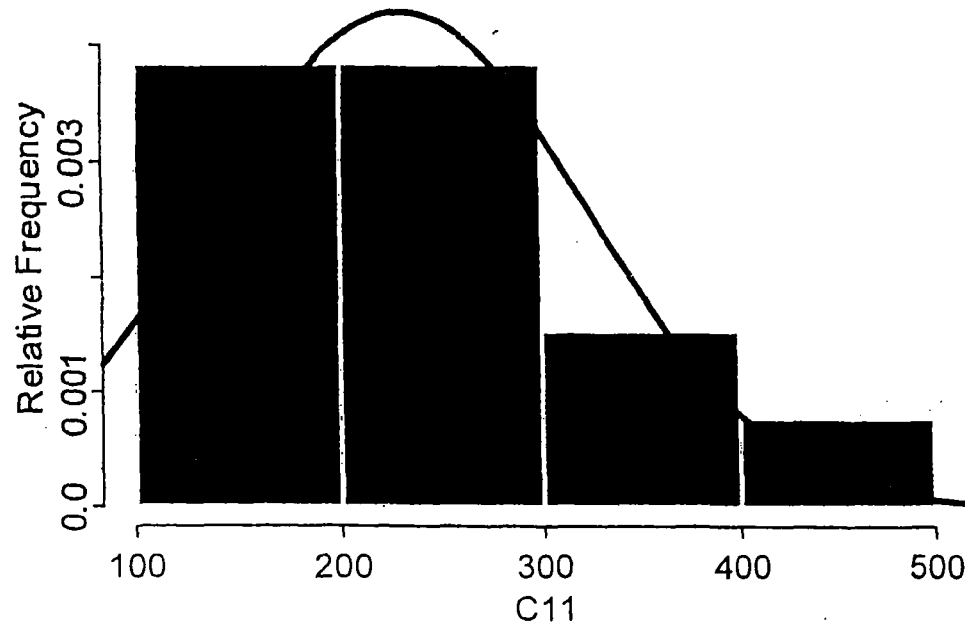
Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
181 A1					201						
182 A2					164						
184 A4					206						
185 B2					174						
186 B4					144						
187 E1					134						
188 E2					215						
189 E3					439						
191 E4					359						
192 F2					151						
193 F4					218						
194 G2					330						
195 G4					253						
90 E2	60 sec				361						

Bodine Environmental Services, Inc. Job Number # 112025

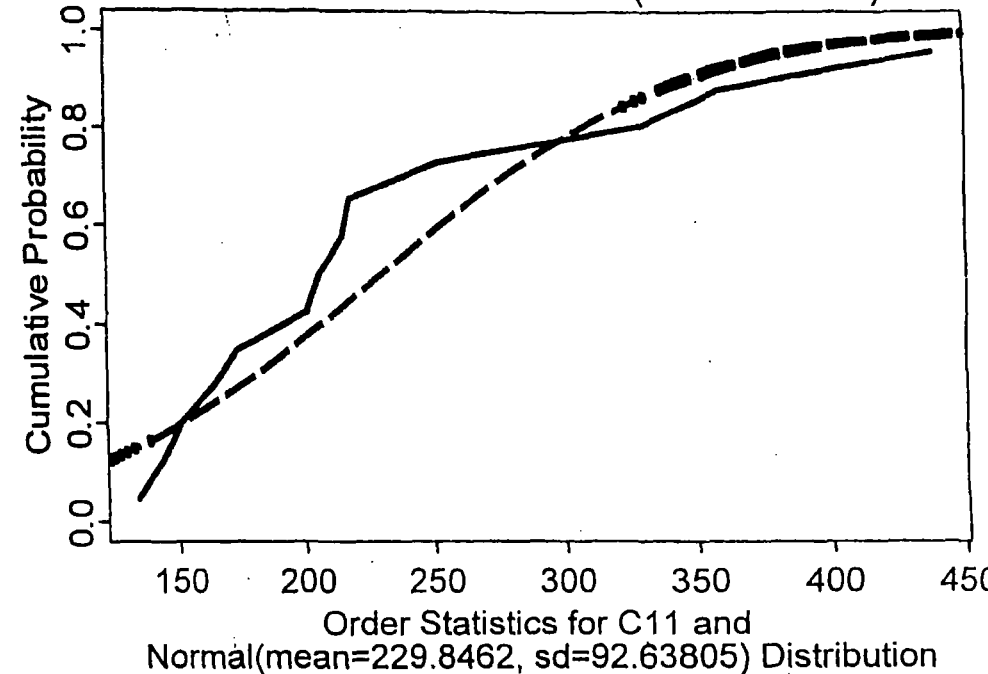
183 during reset & recalibration - XRF made continuous beep

Results of Shapiro-Wilk GOF Test for C11 in XRF.Data column "K"

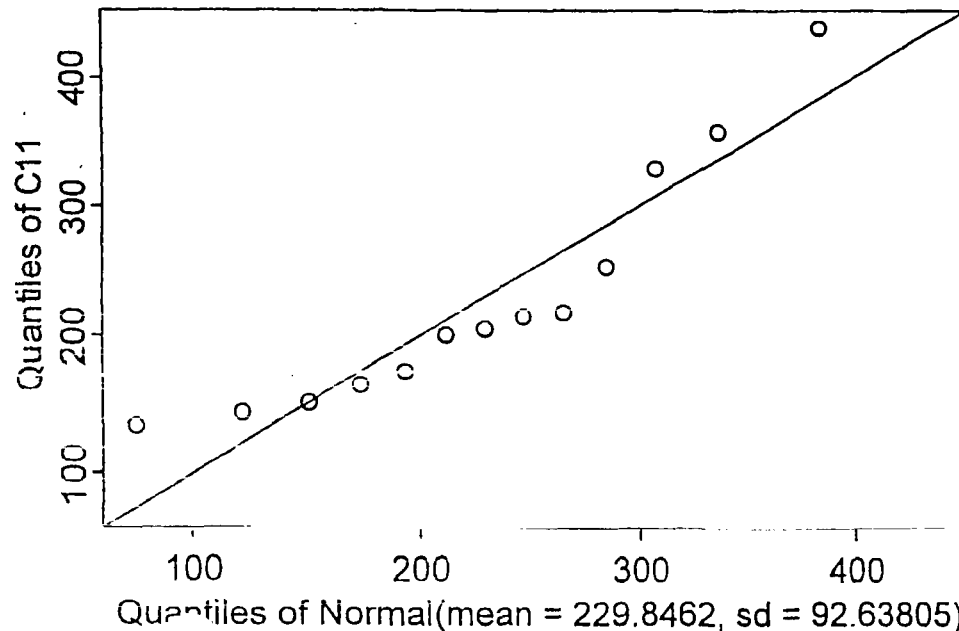
Histogram of Observed Data with Fitted Normal Distribution



Empirical CDF for C11 (solid line) with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized Distribution:

Normal

Estimated Parameters:

mean = 229.8462
sd = 92.63805

Data:

C11 in XRF.Data

Sample Size:

13

Test Statistic:

W = 0.8672677

Test Statistic Parameter:

n = 13

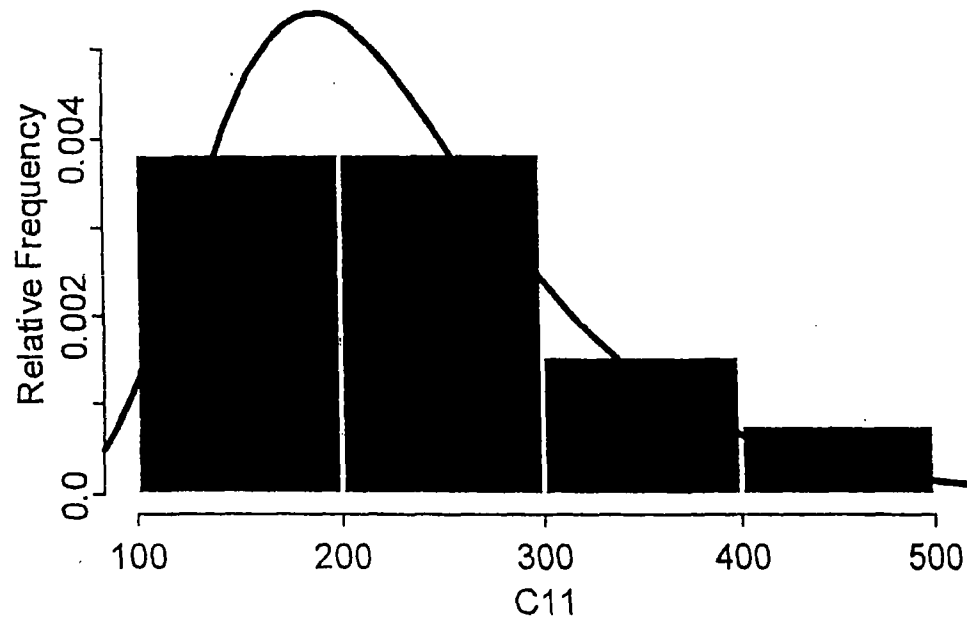
P-value:

0.04809103

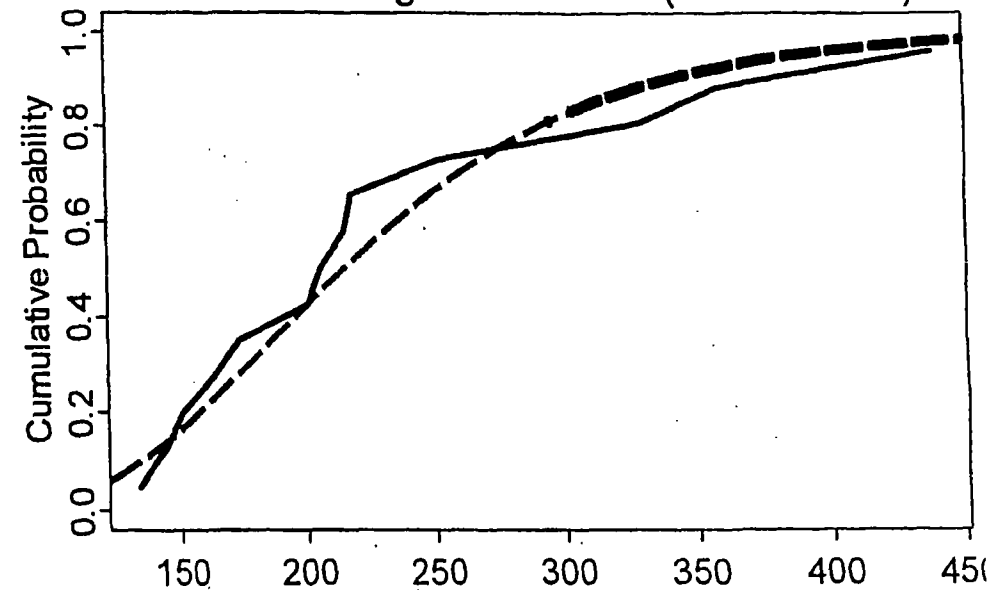
Null rejected: not normally distributed

Results of Shapiro-Wilk GOF Test for C11 in XRF.Data ^{Excel} Column "k"

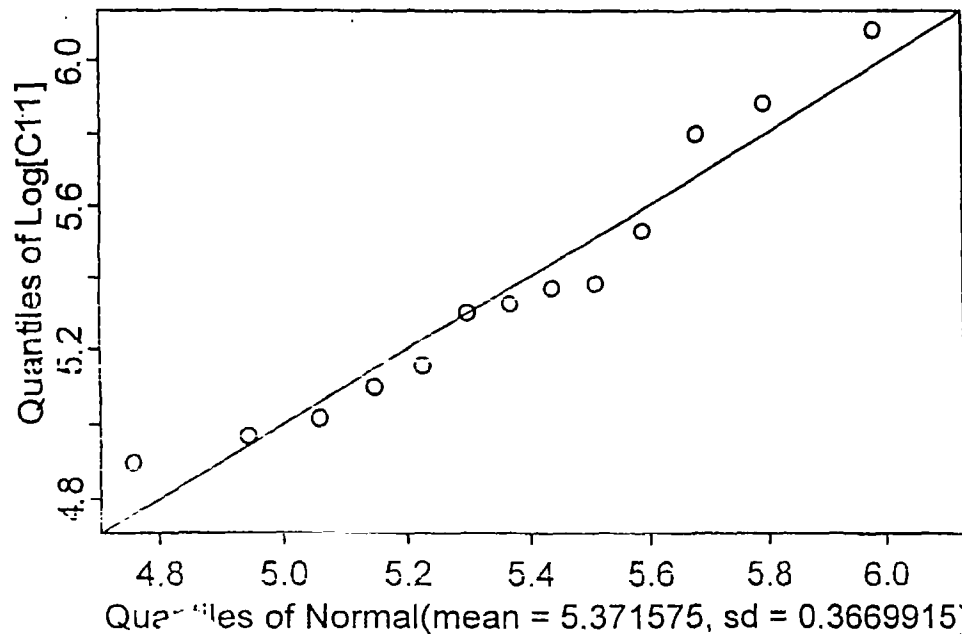
Histogram of Observed Data
with Fitted Lognormal Distribution



Empirical CDF for C11 (solid line)
with Fitted Lognormal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Lognormal

Estimated Parameters:

meanlog = 5.371575

sdlog = 0.3669915

Data:

C11 in XRF.Data

Sample Size:

13

Test Statistic:

W = 0.9369767

Test Statistic Parameter:

n = 13

P-value:

0.4189637

*Null accepted: lognormally
distributed*

Excel
Column "K"

Results of Distribution Parameter Estimation

Assumed Distribution: Lognormal

Estimated Parameter(s): mean = 228.9407
cv = 0.3726535

Estimation Method: mvue

Date: C11 in XRF.Data

Sample Size: 13

Number NA/NaN/Inf's: 53

Confidence Interval for: mean

Confidence Interval Method: Land

Confidence Interval Type: upper

Confidence Level: 95%

Confidence Interval: LCL = 0
UCL = 283.6341

awwing.xls

A	B	C	D	E
239	93.5	214	113.8	138.8
115.8	76	243	184.2	107.5
135.2	110	176.4	130.6	596.4
202.3	204.8	109.8	142.9	300.6
234	126.1	253.2	195	90.2
263	160.3	221	381.8	231
187	490.4	175.7	436.8	110.9
153.7	286	515.2	585.2	279.4
227.2	432.8	150.9	289	
554.4	249.8	N=9	360.2	N=8
N=10	179.9		213.4	
	271		158.5	
	320.8		295.2	
	190.5		222.8	
	N=14		230.2	
			174	
			278.8	
		N=17		

$UCL > 400 = \text{Additional Cleanup Required}$

ONLY "E" Fits this Criteria

RECEIVED
IEPA
JUN 11 2002
COLLINSVILLE OFFICE

Date/Time

5/22/02 10:05
 5/22/02 10:09
 5/22/02 10:11
 5/22/02 10:34
 5/22/02 10:41
 5/22/02 10:53
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 5/22/02 11:15
 5/22/02 11:15
 5/22/02 11:16
 5/22/02 11:20
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 5/22/02 11:22
 5/22/02 11:23
 5/22/02 11:23
 5/22/02 11:24
 5/22/02 11:25
 5/22/02 11:25

Final 13 lots

XRF #	Lead	+/-	Date/Time
1	NA		6/3/02 15:45
2	239	45.4	6/3/02 15:46
3	115.8	31.6	6/3/02 15:47
4	135.2	34	6/3/02 15:47
5	202.6	53	6/3/02 15:48
6	234	47.2	6/3/02 15:48
7	268	53.8	6/3/02 15:49
8	187	46.4	6/3/02 15:49
9	153.7	35.5	6/3/02 15:50
10	227.2	45.6	6/3/02 15:50
11	554.4	67	6/3/02 15:51
12	<LOD	39.15	6/3/02 15:57
13	93.5	34.3	6/3/02 15:57
14	194.6	45	6/3/02 15:58
15	126	39.5	6/3/02 15:58
16	768	81.4	6/3/02 15:59
17	528.4	67.4	6/3/02 16:00
18	584.4	70.1	6/3/02 16:01
19	672	76	6/3/02 16:01
20	734	76.1	6/3/02 16:02
21	415.2	50.1	6/3/02 16:03
22	596.4	68	6/3/02 16:03
23	474.4	63.6	6/3/02 16:04
24	387.8	55.4	6/3/02 16:05
25	339.6	57.1	6/3/02 16:05
26	128.1	43.5	6/3/02 16:12
27	172	110	6/3/02 16:12
28	264	60	6/3/02 16:14
29	172.2	39.2	6/3/02 16:15
30	349.6	54.5	6/3/02 16:16
31	207.6	44	6/3/02 16:16
32	625.2	69.4	6/3/02 16:17
33	539.2	60.1	6/3/02 16:17
34	78	31.5	6/3/02 16:18
35	490.8	76.6	6/3/02 16:18
36	153.3	38.5	6/3/02 16:19
37	1349.6	110	6/3/02 16:19
38	788.4	86.9	6/3/02 16:20
39	117.8	35.4	6/3/02 16:31
40	156.4	45.8	6/3/02 16:31
41	235	44.9	6/3/02 16:32
42	143.9	48.4	6/3/02 16:32
43	129.4	41.2	6/3/02 16:33
44	180.9	43.7	6/3/02 16:33

02-18.0-419-09

02-18.0-420-009

yes

02-18.0-419-05

yes

02-18.0-419-07

(OK)

5/22/02 12:33	97	273.2	66.9	6/3/02 22:36
5/22/02 12:34	98	359.2	57.5	6/3/02 22:36
5/22/02 12:34	99	244.4	53.1	6/3/02 22:37
5/22/02 12:35	100	1169.6	88.3	6/3/02 22:37
5/22/02 12:47	101	292.8	59.9	6/3/02 22:38
5/22/02 12:47	102	502.8	51.5	6/3/02 22:39
5/22/02 12:48	103	1300	130	6/3/02 22:40
5/22/02 12:49	104	1509.6	130	6/3/02 22:40
5/22/02 12:49	105	692.8	69.6	6/3/02 22:41
5/22/02 12:50	106	320	72.9	6/3/02 22:41
5/22/02 12:50	107	1529.6	130	6/3/02 22:42
5/22/02 12:51	108	1009.6	100	6/3/02 22:43
5/22/02 12:51	109	1668.8	120	6/3/02 22:43
5/22/02 12:52	110	142.3	41.9	6/3/02 23:04
5/22/02 12:52	111	218.8	49.4	6/3/02 23:05
5/22/02 12:53	112	140.9	49.5	6/3/02 23:06
5/22/02 12:53	113	134.8	43.9	6/3/02 23:06
5/22/02 12:54	114	219	53.2	6/3/02 23:07
5/22/02 12:54	115	1269.6	110	6/3/02 23:07
5/22/02 12:55	116	522.8	69.9	6/3/02 23:08
5/22/02 12:56	117	88.2	46	6/3/02 23:08
5/22/02 12:56	118	472.8	47.1	6/3/02 23:11
5/22/02 12:57	119	219.8	50.4	6/3/02 23:13
5/22/02 12:57	120	214	49.9	6/3/02 23:20
5/22/02 12:58	121	243	50.8	6/3/02 23:22
5/22/02 12:58	122	176.4	47.6	6/3/02 23:23
5/22/02 12:59	123	109.8	37.7	6/3/02 23:23
5/22/02 12:59	124	253.2	46.1	6/3/02 23:25
5/22/02 13:00	125	221	52.2	6/3/02 23:26
5/22/02 13:00	126	175.7	49.4	6/3/02 23:26
5/22/02 13:01	127	515.2	53.4	6/3/02 23:27
5/22/02 13:01	128	150.9	40.4	6/3/02 23:29
5/22/02 13:02	129	113.8	32.4	6/3/02 23:40
5/22/02 13:03	130	184.2	46	6/3/02 23:40
5/22/02 13:03	131	130.6	37.7	6/3/02 23:41
5/22/02 13:04	132	142.9	37.5	6/3/02 23:41
5/22/02 13:04	133	195	35.9	6/3/02 23:42
5/22/02 13:05	134	381.8	52.7	6/3/02 23:42
5/22/02 13:05	135	436.8	58	6/3/02 23:43
5/22/02 13:06	136	585.2	80.4	6/3/02 23:43
5/22/02 13:06	137	289	64.3	6/3/02 23:44
5/22/02 13:07	138	360.2	57.9	6/3/02 23:45
5/22/02 13:07	139	213.4	56	6/3/02 23:45
5/22/02 13:08	140	158.5	42.2	6/3/02 23:45
5/22/02 13:08	141	295.2	51.9	6/3/02 23:46
5/22/02 13:32	142	222.8	57.9	6/3/02 23:46
5/22/02 13:33	143	230.2	43.4	6/3/02 23:47
5/22/02 13:33	144	174	48.5	6/3/02 23:48
5/22/02 13:34	145	278.8	51.8	6/3/02 23:48
5/22/02 13:34	146	176.9	42.2	37411.00374
5/22/02 13:35	147	126	40	37411.00412
5/22/02 13:35	148	186.3	49.1	37411.00444

7/25

02-18.0-419-088

02-18.0-419-068

7/25

02-18.0-419-096

02-18.0-419-056

02-18.0-419-079

5/22/02 13:36
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5/22/02 14:07

149	275	57.4	37411.00477
150	285.6	62.8	37411.00506
151	247.6	52.7	37411.00536
152	800	82.5	37411.00566
153	576.4	76.4	37411.00613
154	330.4	58	37411.00653
155	112.6	36.5	37411.00692
156	51	29.5	37411.00734
157	96.9	39.7	37411.00765
158	<LOD	42.45	37411.00797
159	<LOD	35.1	37411.00833
160	160.5	43.7	37411.0087
161	138.8	47.5	37411.01056
162	107.5	36.8	37411.01088
163	596.4	64.7	37411.01119
164	300.6	59.7	37411.01166
165	90.2	34.8	37411.01205
166	231	60.4	37411.01247
167	110.9	33	37411.01279
168	279.4	51.3	37411.01317

YES

02-18.0-419-092

✓

BODINE ENVIRONMENTAL SERVICES, INC.

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

6-3-02

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-419-094

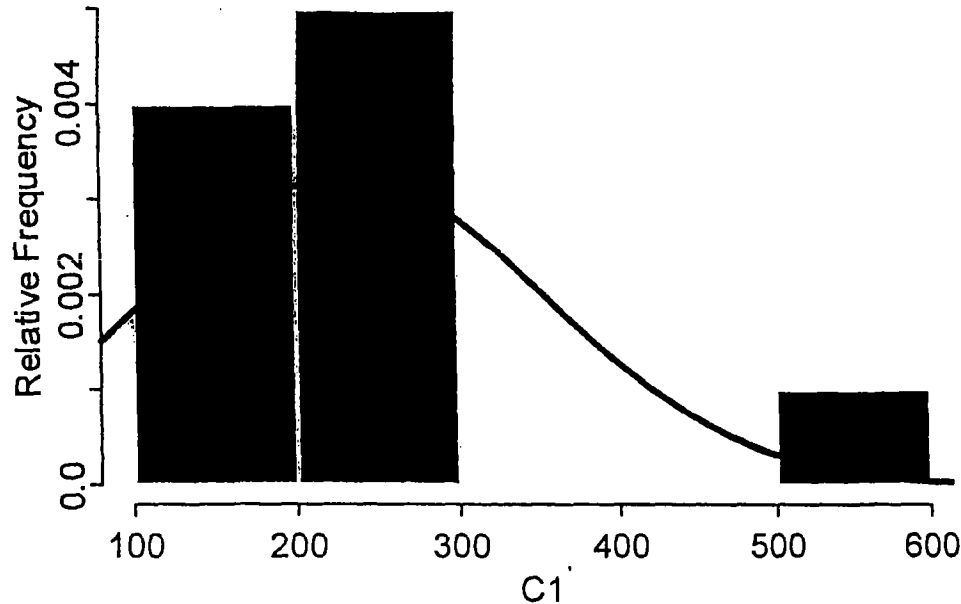
Name and Address: LV THOMAS & JIM HAYE - 505 GRAY BLVD.

[illegible]

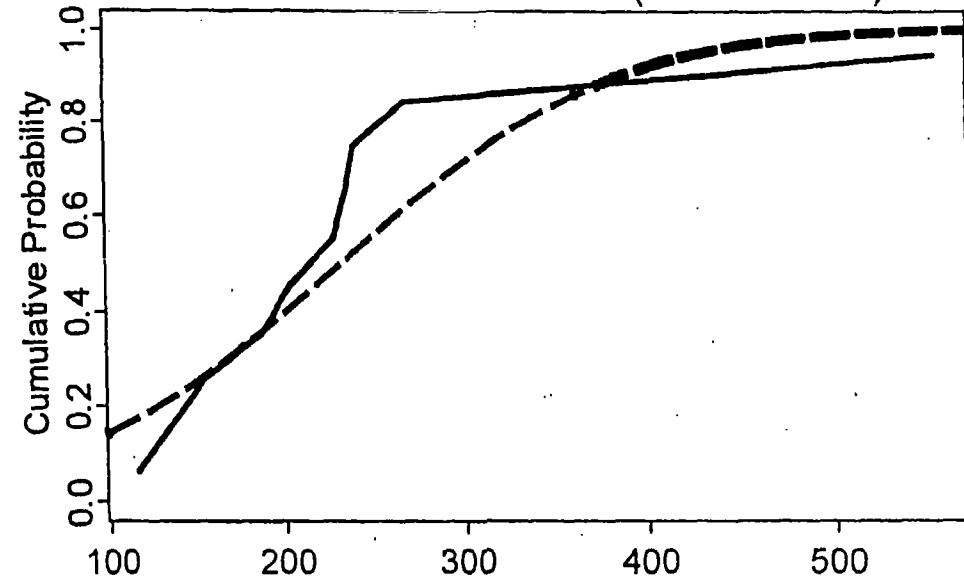
Results of Shapiro-Wilk GOF Test for C1 in awning

Columns "A"

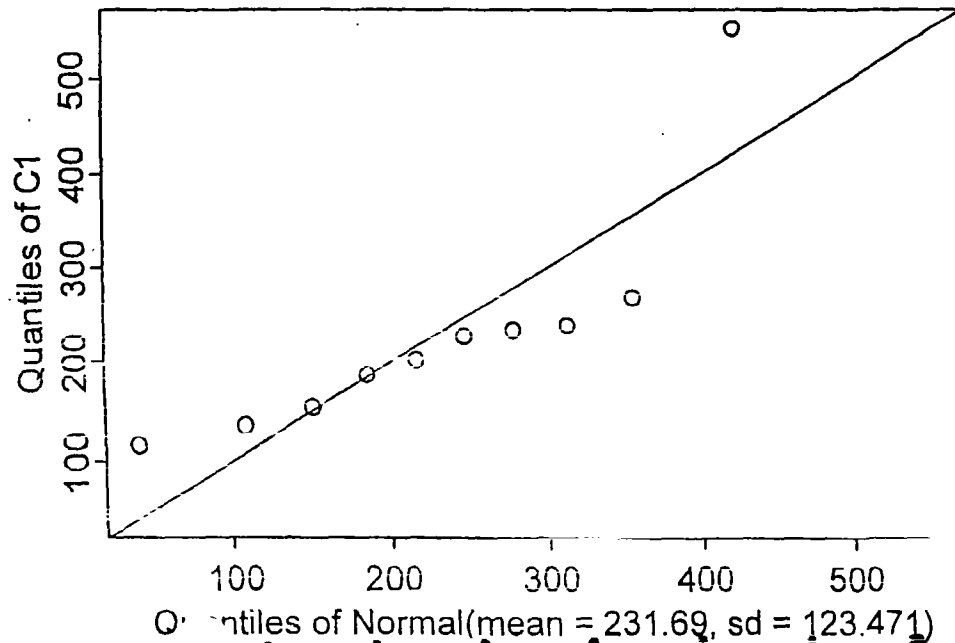
Histogram of Observed Data
with Fitted Normal Distribution



Empirical CDF for C1 (solid line)
with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Normal

Estimated Parameters:

mean = 231.69
sd = 123.471

Data:

C1 in awning

Sample Size:

10

Test Statistic:

W = 0.7479986

Test Statistic Parameter:

n = 10

P-value:

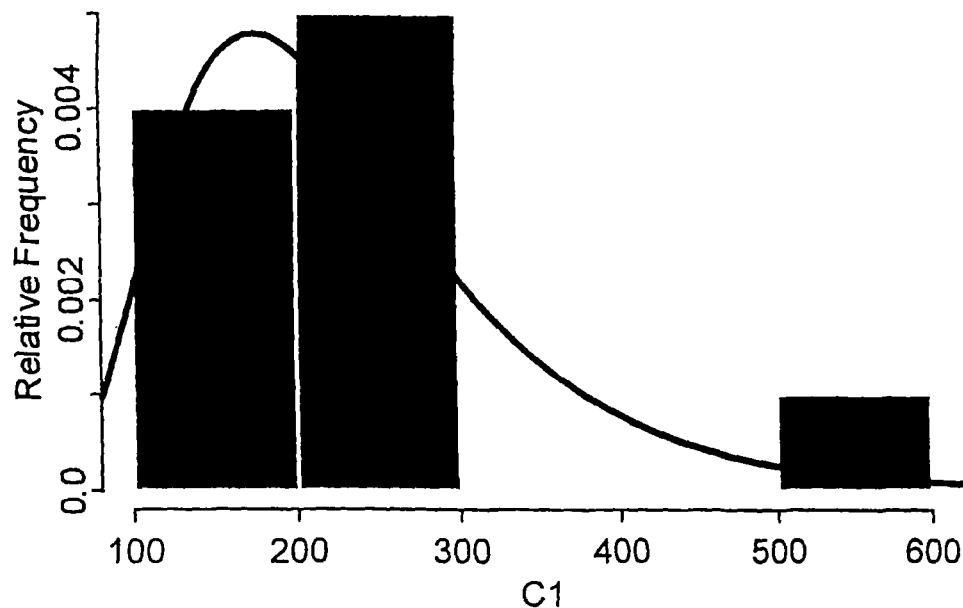
0.003373936

*Null rejected: not normally
distributed*

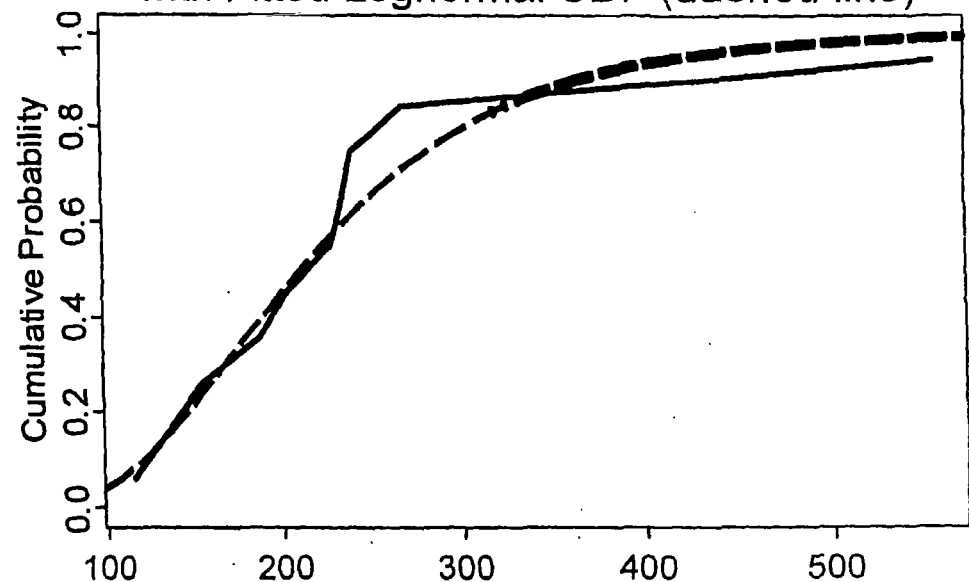
Results of Shapiro-Wilk GOF Test for C1 in awning

Excel
Column "A"

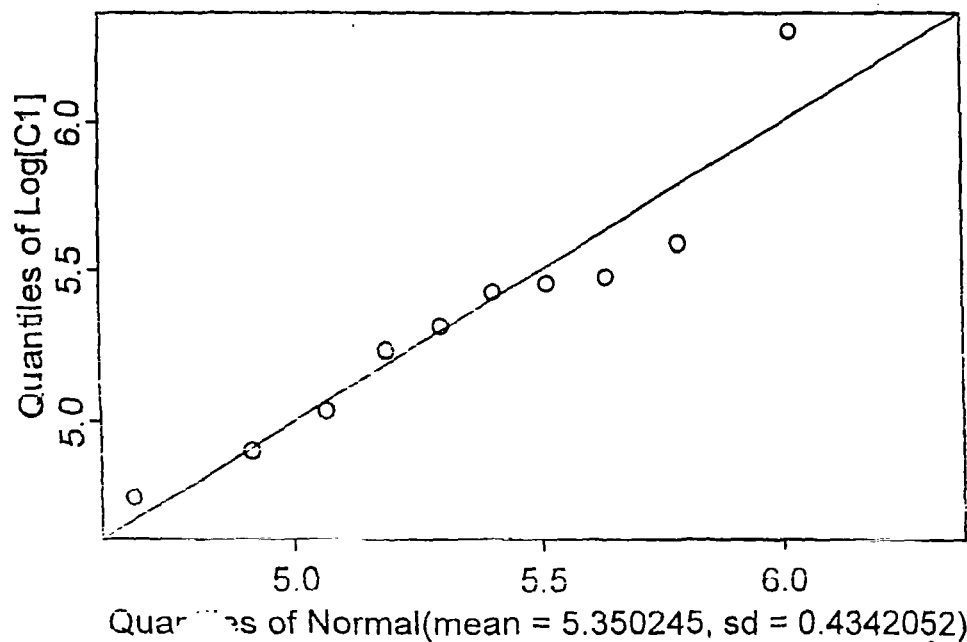
Histogram of Observed Data
with Fitted Lognormal Distribution



Empirical CDF for C1 (solid line)
with Fitted Lognormal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Lognormal

Estimated Parameters:

meanlog = 5.350245
sdlog = 0.4342052

Data:

C1 in awning

Sample Size:

10

Test Statistic:

W = 0.92126

Test Statistic Parameter:

n = 10

P-value:

0.3675837

*Null accepted : lognormally
distributed*

Excel
Column "A"

Results of Distribution Parameter Estimation

Assumed Distribution: Lognormal

Estimated Parameter(s): mean = 229.1651
cv = 0.4407555

Estimation Method: mvue

Data: C1 in awning

Sample Size: 10

Number NA/NaN/Inf's: 7

Confidence Interval for: mean

Confidence Interval Method: Land

Confidence Interval Type: upper

Confidence Level: 95%

Confidence Interval: LCL = 0
UCL = 315.1526

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

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Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

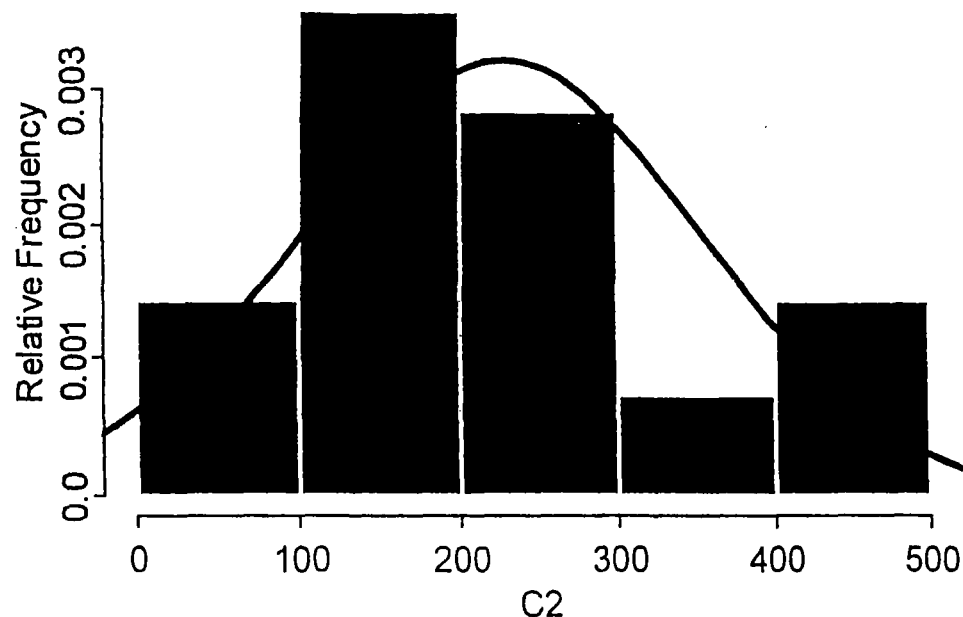
Parcel Number: 02-18.0-419-057

Name and Address: T-jay Inc. 583 Gray Blvd.

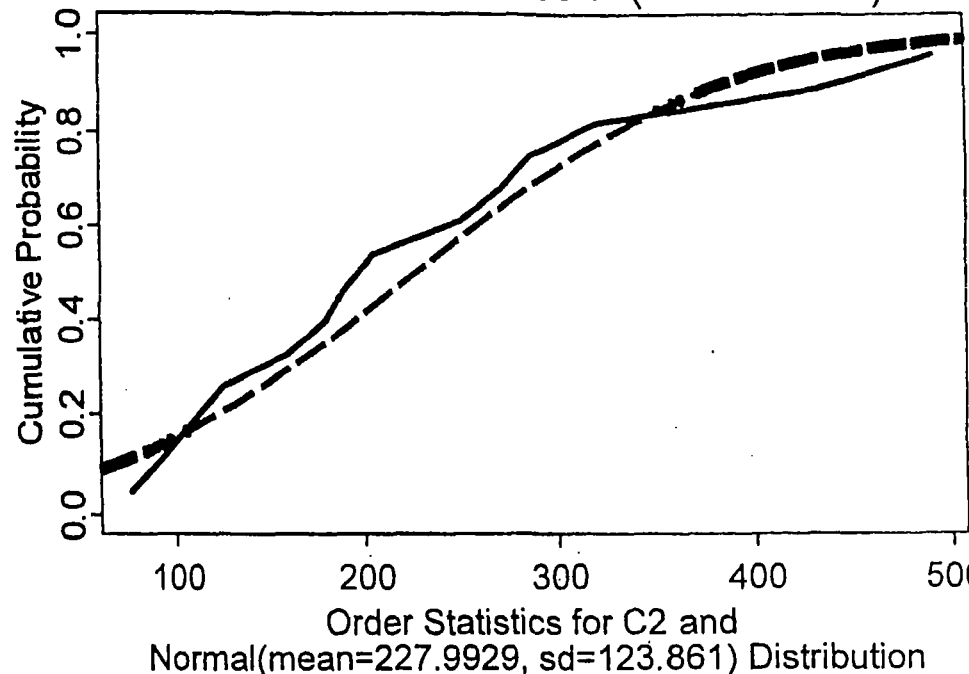
XRF

	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
59	A1					93.5						
60	A2					76						
61	A4					110						
62	B1					204.8						
63	B2					126.1						
64	B4					160.3						
65	C1					490.4						
66	D1					286						
67	E1					432.8						
68	F3					241.8						
69	F1					141.9						
70	F3					2.11						
71	G1					320.8						
72	G3					190.5						

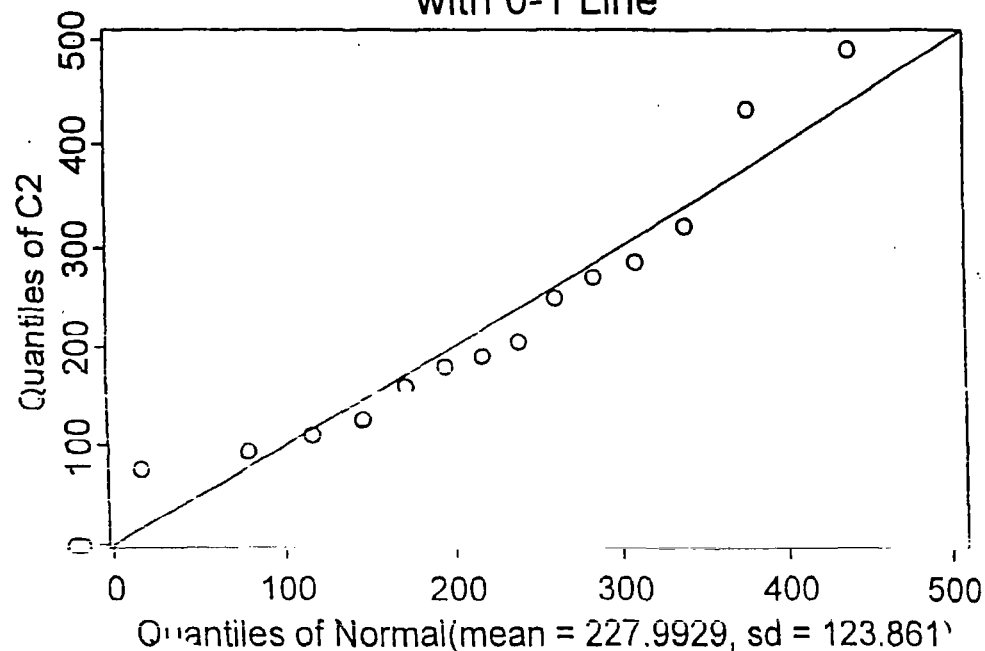
Histogram of Observed Data
with Fitted Normal Distribution



Empirical CDF for C2 (solid line)
with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Normal

Estimated Parameters:

mean = 227.9929
sd = 123.861

Data:

C2 in awning

Sample Size:

14

Test Statistic:

W = 0.9267695

Test Statistic Parameter:

n = 14

P-value:

0.2747588

*Null accepted: normally
distributed*

α = 0.05

Excel
Column "B"

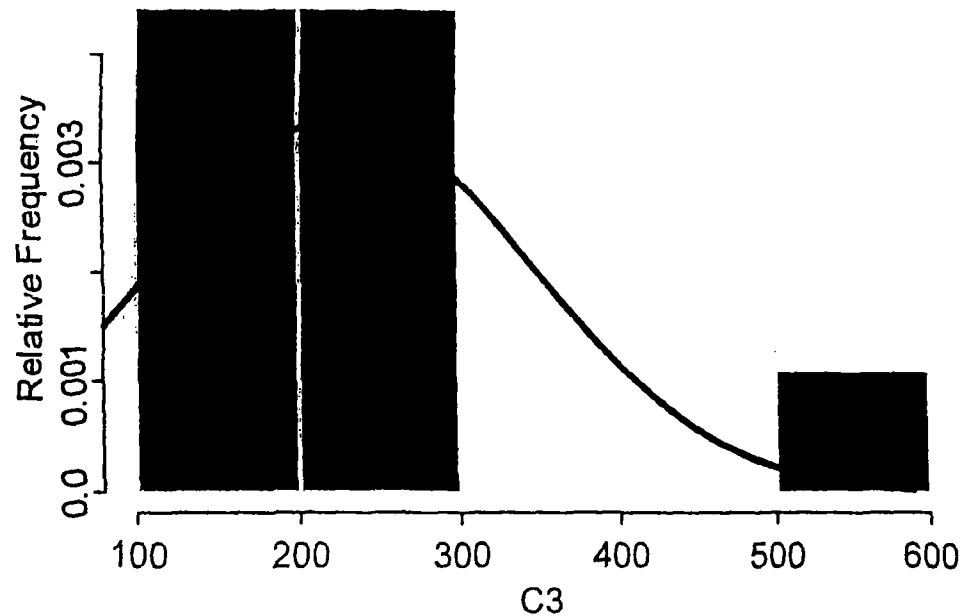
Results of Distribution Parameter Estimation

Assumed Distribution:	Normal
Estimated Parameter(s):	mean = 227.9929 sd = 123.861
Estimation Method:	mvue
Data:	<u>C2 in awning</u>
Sample Size:	14
Number NA/NaN/Inf's:	3
Confidence Interval for:	mean
Confidence Interval Method:	Exact
Confidence Interval Type:	<u>upper</u>
Confidence Level:	<u>95%</u>
Confidence Interval:	LCL = -Inf <u>UCL = 286.6165</u>

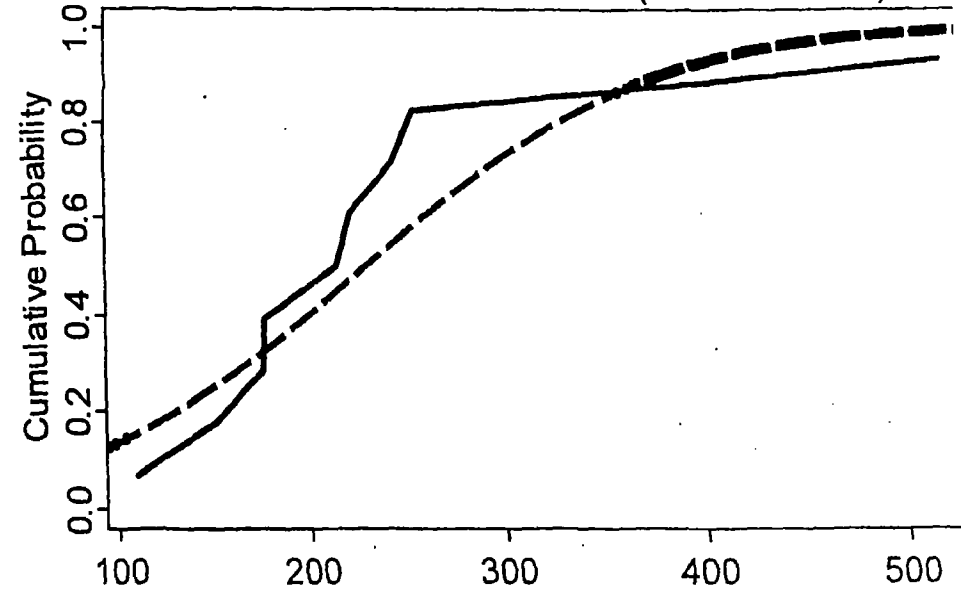
BODINE ENVIRONMENTAL SERVICES, INC.

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

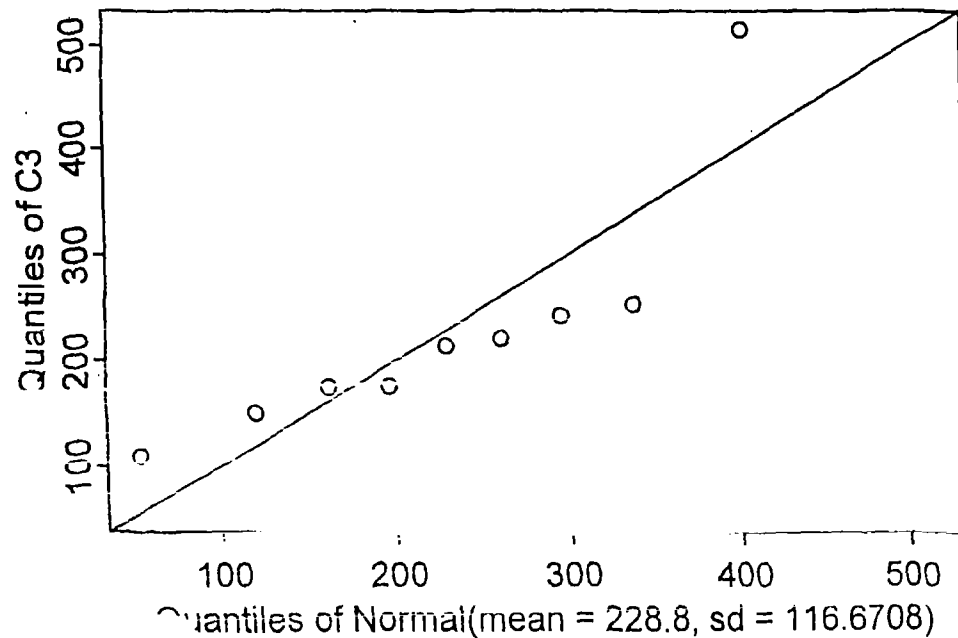
Histogram of Observed Data with Fitted Normal Distribution



Empirical CDF for C3 (solid line) with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized Distribution:	Normal
Estimated Parameters:	mean = 228.8 sd = 116.6708
Data:	C3 in awning
Sample Size:	500
Test Statistic:	W = 0.769115
Test Statistic Parameter:	n = 500
P-value:	0.00902248

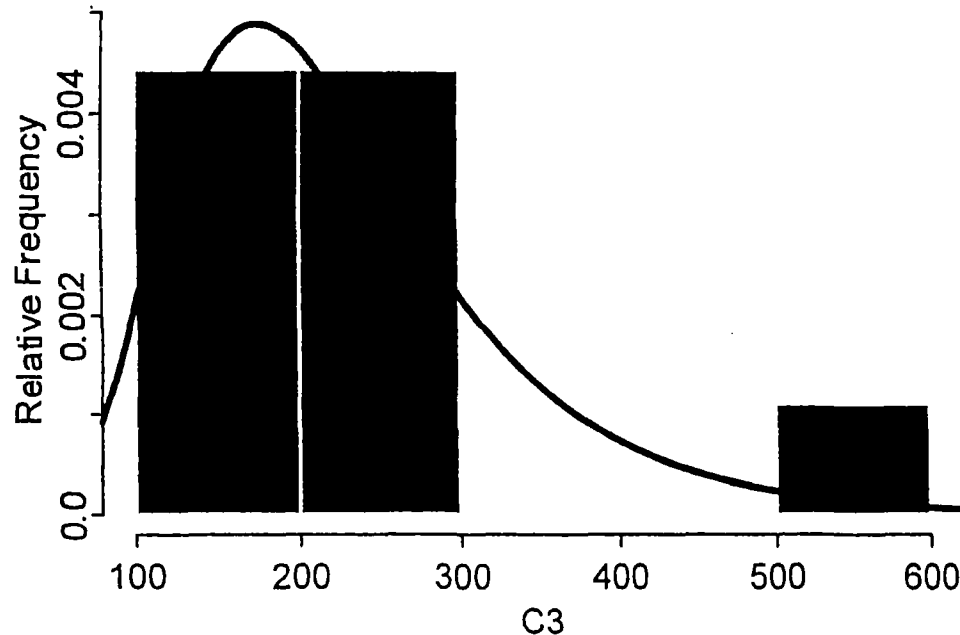
Null Rejected: not normally distributed

$\alpha = 0.05$

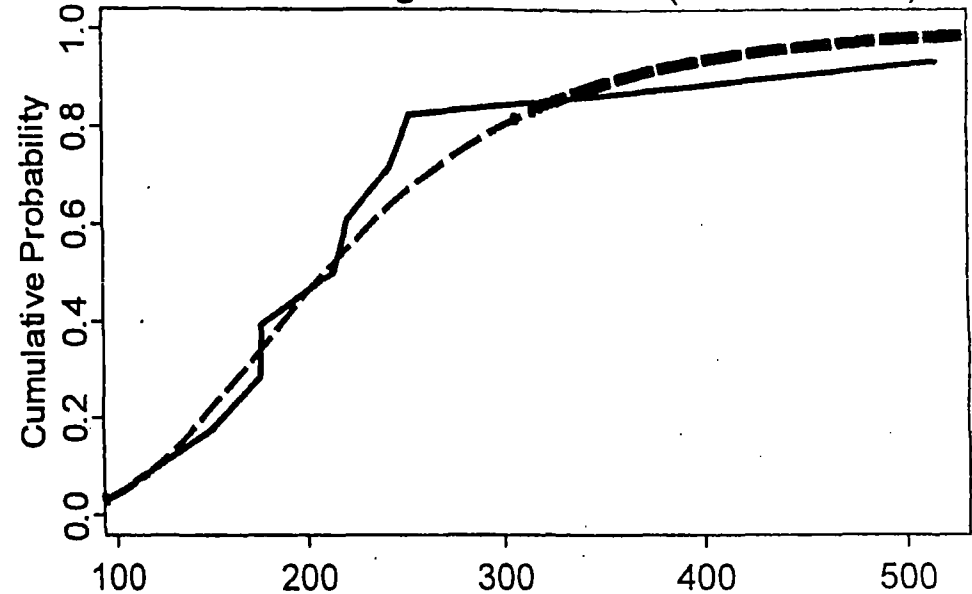
Results of Shapiro-Wilk GOF Test for C3 in awning

data
column "C"

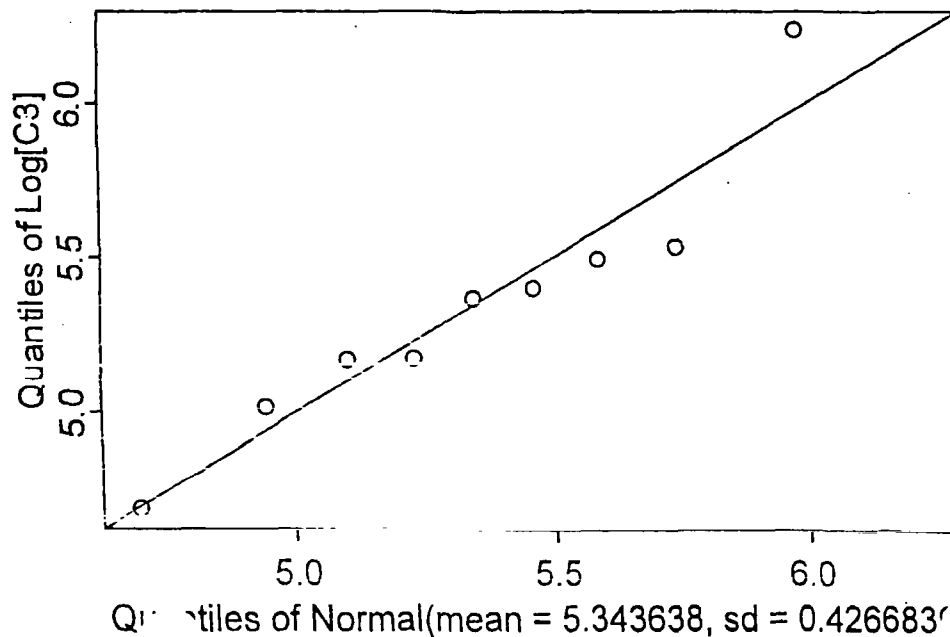
Histogram of Observed Data
with Fitted Lognormal Distribution



Empirical CDF for C3 (solid line)
with Fitted Lognormal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Lognormal

Estimated Parameters:

meanlog = 5.343638
sdlog = 0.4266839

Data:

C3 in awning

Sample Size:

9

Test Statistic:

W = 0.929574

Test Statistic Parameter:

n = 9

P-value:

0.4773

Null accepted: lognormally
distributed

$\alpha = 0.05$

Excel
Column "C"

Results of Distribution Parameter Estimation

Assumed Distribution:

Estimated Parameter(s):

Estimation Method:

Data:

Sample Size:

Number NA/NaN/Inf's:

Confidence Interval for:

Confidence Interval Method:

Confidence Interval Type:

Confidence Level:

Confidence Interval:

Lognormal

mean = 226.7641
cv = 0.4317209

mvue

C3 in awning

9

8

mean

Land

upper

95%

LCL = 0
UCL = 318.0086

Statistics Column "D"

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RCRA Closures

Client: Illinois Environmental Protection Agency
Job Description: East Saint Louis Awning, Site #160 LPC#: 1630455241

Parcel Number: 02-18.0-419-056

Name and Address: Orgy Moore 585 Gray Blvd.

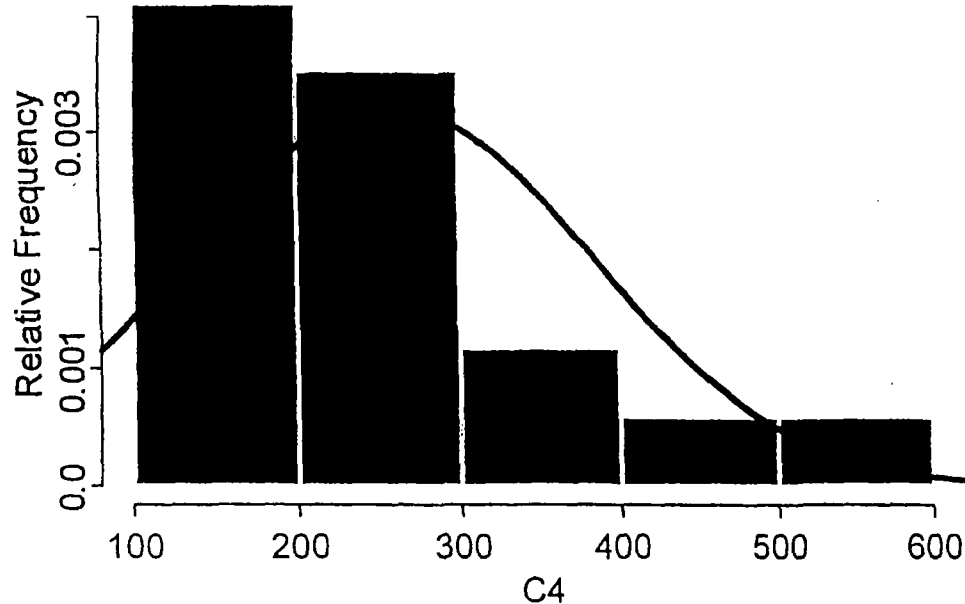
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
A1					113.8						
A2					184.2						
A3					130.6						
A4					142.9						
B1					195						
B2					381.8						
C1					436.8						
D1					585.2						
E1					289						
E2					360.2						
E3					213.4						
F1					158.5						
F2					245.2						
F3					223.8						
G1					230.2						
G2					174						
G3					278.8						

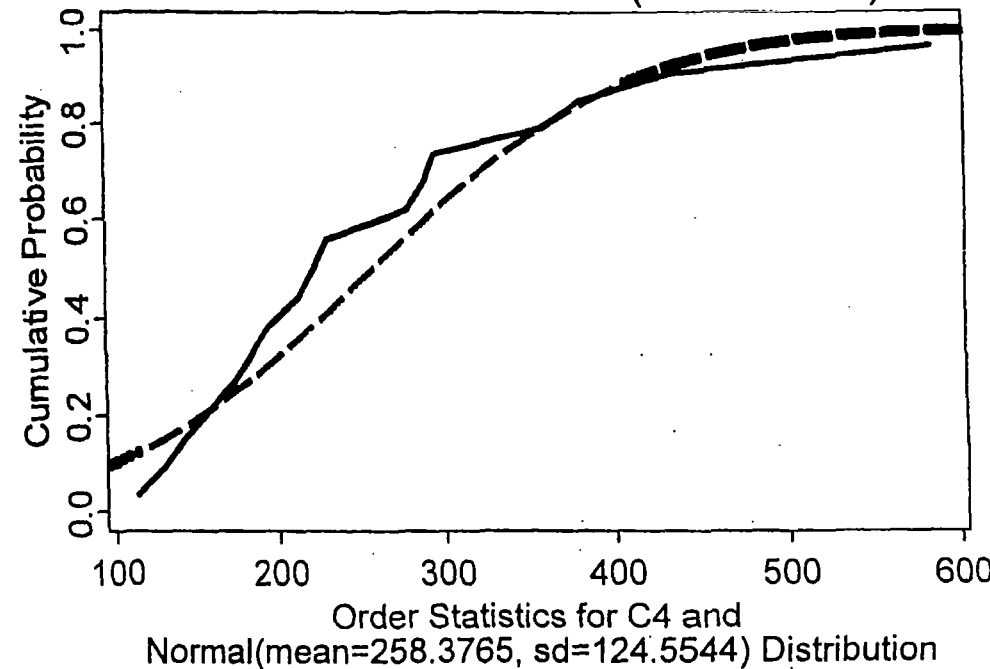
Results of Shapiro-Wilk GOF Test for C4 in awning

Excel Column "D"

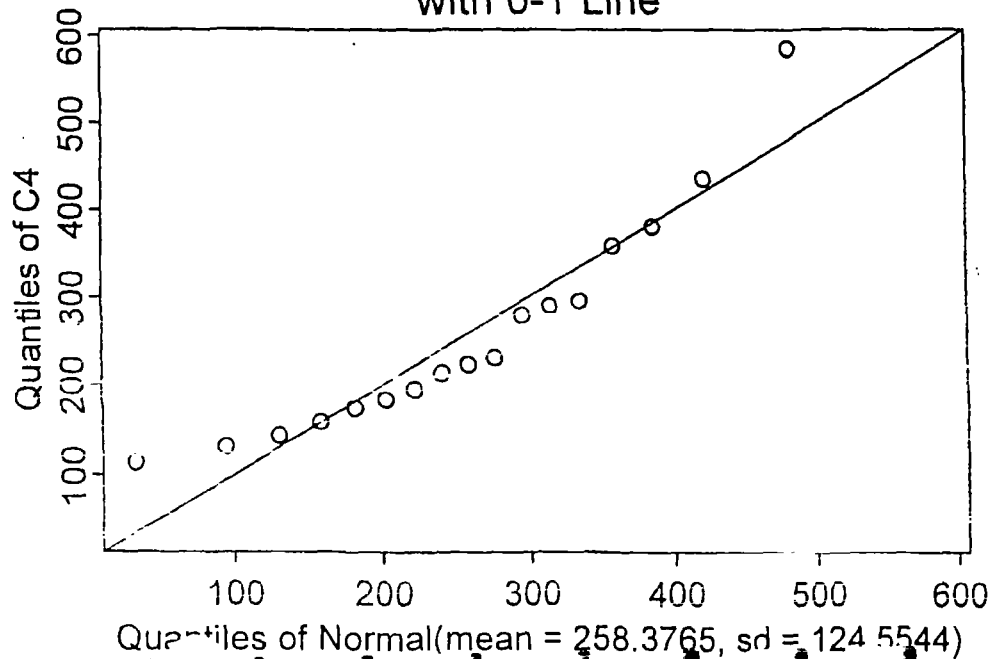
Histogram of Observed Data
with Fitted Normal Distribution



Empirical CDF for C4 (solid line)
with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Normal

Estimated Parameters:

mean = 258.3765
sd = 124.5544

Data:

C4 in awning

Sample Size:

17

Test Statistic:

W = 0.8972978

Test Statistic Parameter:

n = 17

P-value:

0.06122038

*Null accepted. normally
distributed*

Excel
Column "D"

Results of Distribution Parameter Estimation

Assumed Distribution: Normal

Estimated Parameter(s): mean = 258.3765
sd = 124.5544

Estimation Method: mvue

Data: C4 in awning

Sample Size: 17

Confidence Interval for: mean

Confidence Interval Method: Exact

Confidence Interval Type: upper

Confidence Level: 95%

Confidence Interval: LCL = -Inf
UCL = 311.1177

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Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-419-092

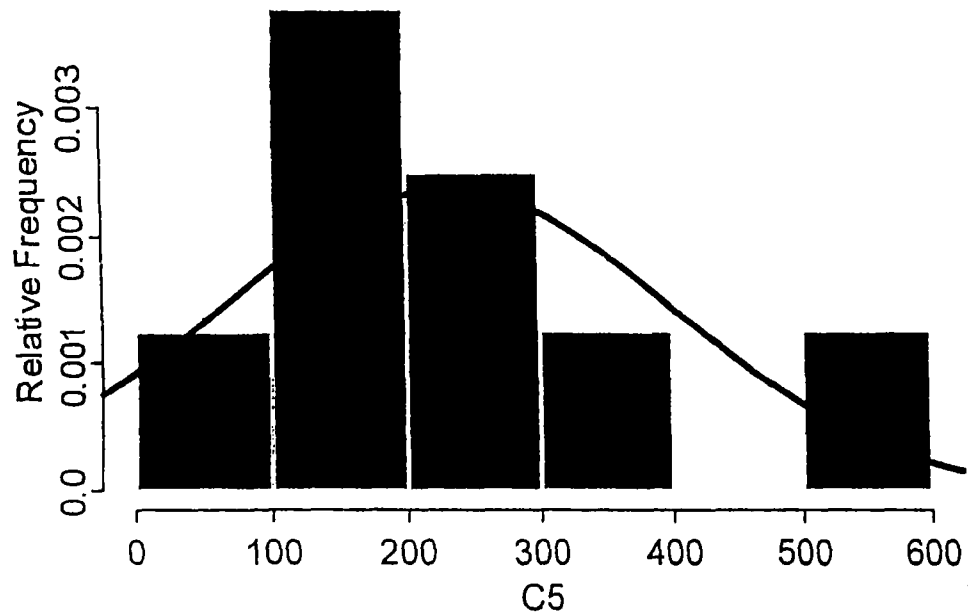
Name and Address: CHAPMAN, ROBERT - 509 GRAY BLVD.

[illegible]

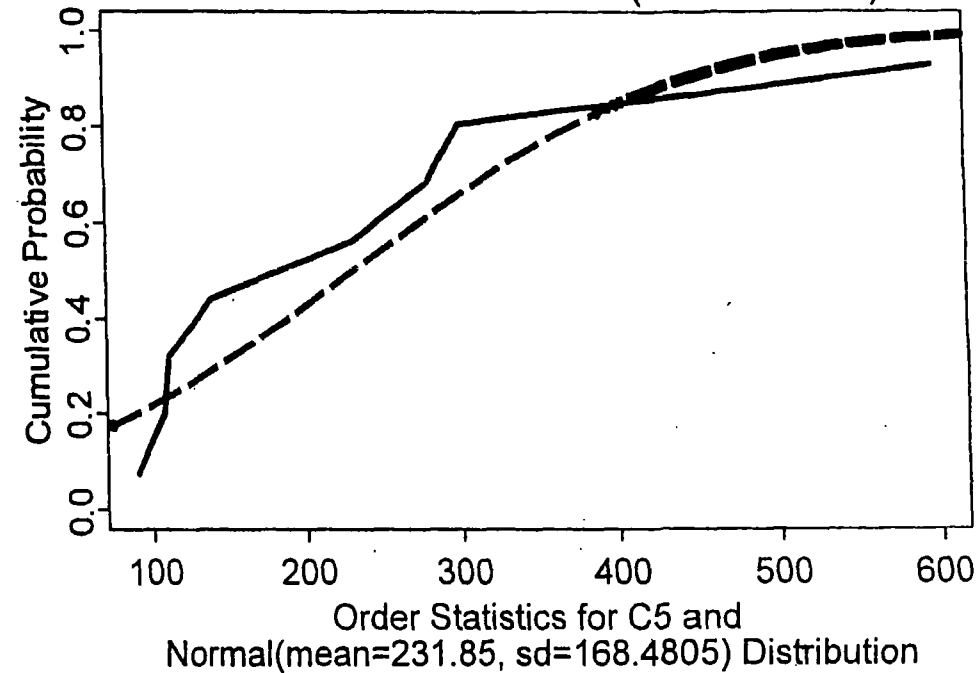
RECEIVED
IERA
JUN 07 2002
COLLINSVILLE OFFICE

Results of Shapiro-Wilk GOF Test for C5 in awning ^{Excel} column "E"

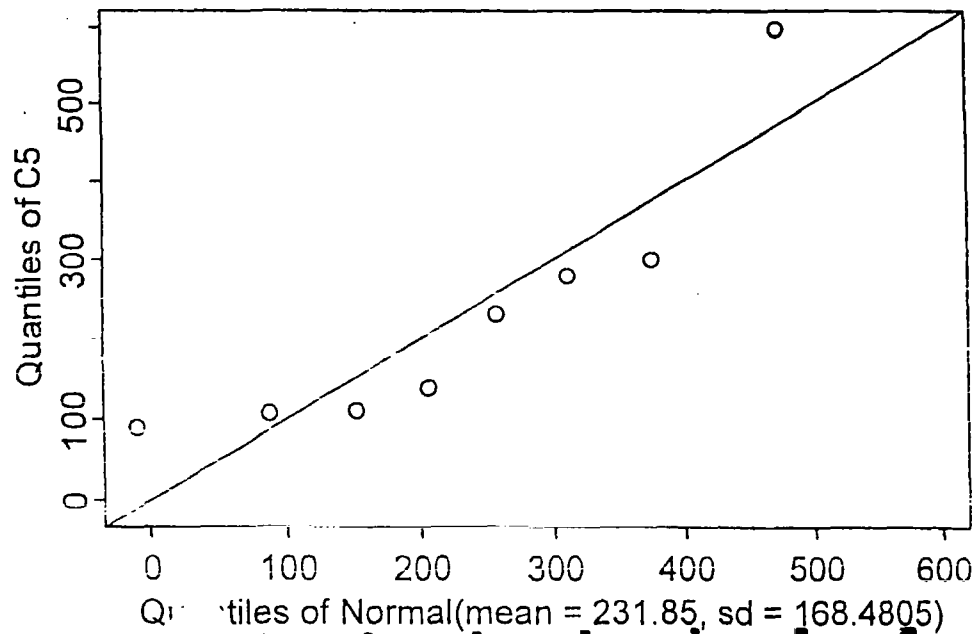
Histogram of Observed Data
with Fitted Normal Distribution



Empirical CDF for C5 (solid line)
with Fitted Normal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

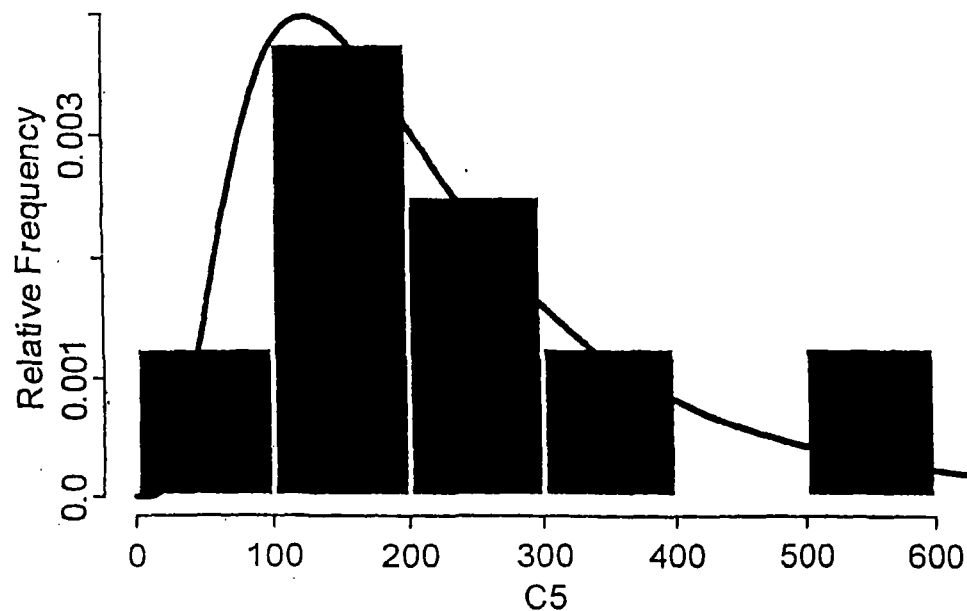
Hypothesized Distribution:	Normal
Estimated Parameters:	mean = 231.85 sd = 168.4805
Data:	C5 in awning
Sample Size:	8
Test Statistic:	W = 0.8136806
Test Statistic Parameter:	n - 6
P-value:	0.040026

Null rejected: not normally distributed

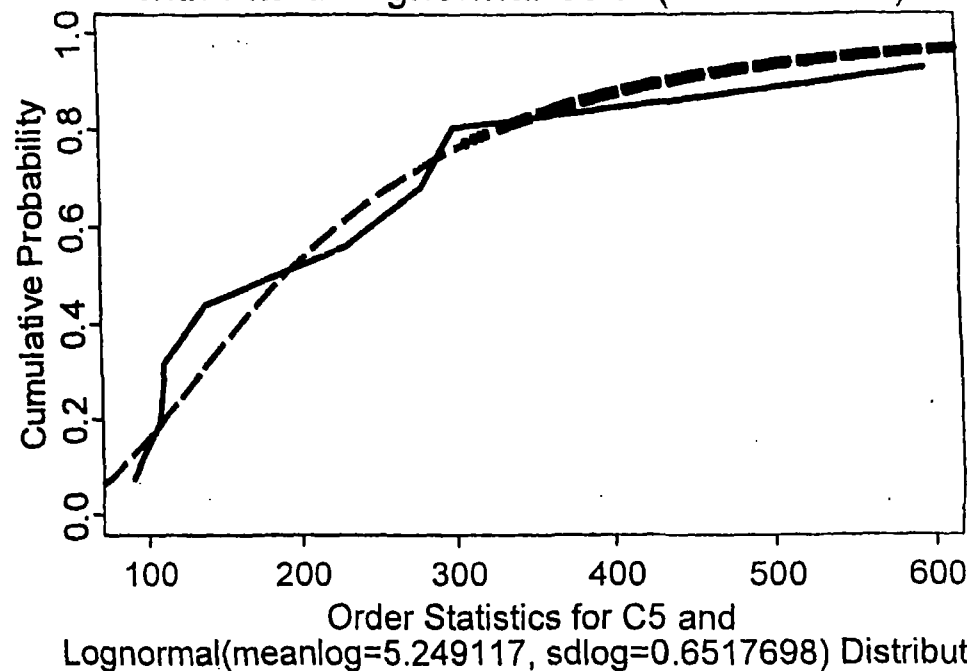
Results of Shapiro-Wilk GOF Test for C5 in awning

Excel
column "E"

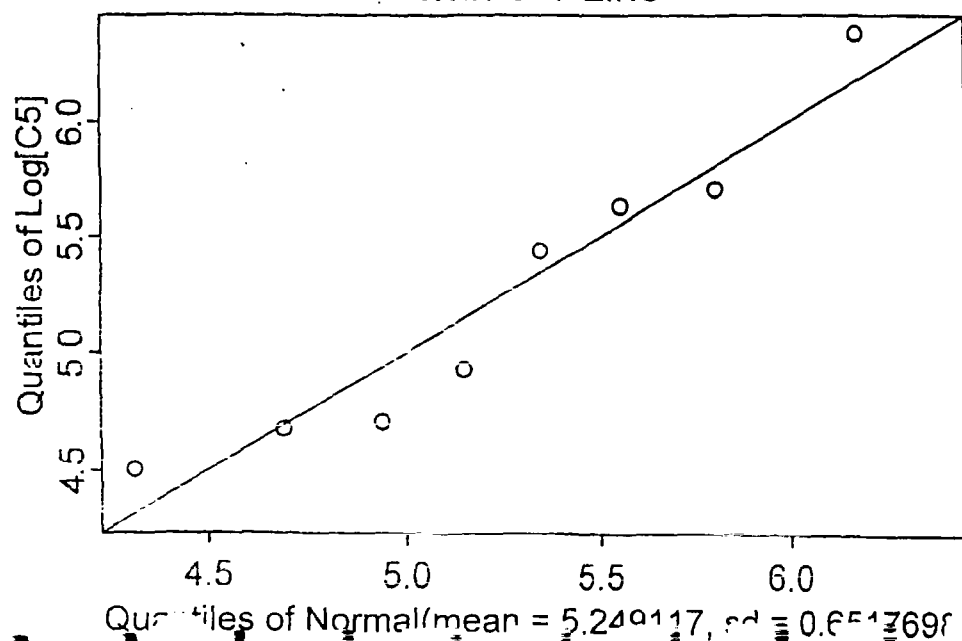
Histogram of Observed Data
with Fitted Lognormal Distribution



Empirical CDF for C5 (solid line)
with Fitted Lognormal CDF (dashed line)



Quantile-Quantile Plot
with 0-1 Line



Results of Shapiro-Wilk GOF

Hypothesized
Distribution:

Lognormal

Estimated Parameters:

meanlog = 5.249117
sdlog = 0.6517698

Data:

C5 in awning

Sample Size:

8

Test Statistic:

W = 0.9253653

Test Statistic Parameter:

n = 8

P-value:

0.4748887

Null accepted: lognormally
distributed

Excel
Column "E"

Results of Distribution Parameter Estimation

Assumed Distribution:	Lognormal
Estimated Parameter(s):	mean = 228.4448 cv = 0.6641501
Estimation Method:	mvue
Data:	<u>C5 in awning</u>
Sample Size:	8
Number NA/NaN/Inf's:	9
Confidence Interval for:	mean
Confidence Interval Method:	Land
Confidence Interval Type:	<u>upper</u>
Confidence Level:	<u>95%</u>
Confidence Interval:	LCL = 0 <u>UCL = 450.725</u>

Appendix H

Field Data Sheets



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-035

Name and Address: Theodore Chamberlain 400 Gray Blvd

	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
145	A5					127						
146	A 6					278						
147	A 7					244						
148	A 8					223						
49	A 9					246						
150	A 10					195						
151	A 11					218						
152	B4					97						
153	B5					127						
154	B6					90						
155	B7					62						
156	B8					437						
157	B9					41						
158	B10					69						
159	B12					87						
160	C4					97						
161	C5					60						
162	C6					71						
163	C7					104						

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.C-204-035

Name and Address: Theodore Chambelain 400 Gray Blvd.

	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
164	C12					162	162					
165	D3					30	30					
166	D4					66	66					
167	D5					43	430					
168	D6					31	439					
169	D7					81	81					
170	D12					85	85					
171	E1					168	128					
172	E2					193	193					
173	E3					64	64					
174	E4					64	64					
175	E5					51	51					
176	E6					58	58					
177	E7					199	199					
178	E8					40	40					
179	E9					45	45					
180	E10					56	56					
181	E11					48	48					
182	E12					48	48					

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-035

Name and Address: Theodore Chamberlain 400 Gray Blvd.

	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
183	F2					111	(111)					
184	F3					96	(96)					
185	F4					110	(110)					
186	F5					77	(77)					
187	F6					53	(53)					
188	F7					247	(247)					
189	F8					47	(47)					
190	F9					45	(45)					
191	F10					57	(57)					
192	F11					69	(69)					
193	F12					169	(169)					
194	G1					113	(113)					
195	G2					244	(244)					
196	G3					104	(104)					
197	G4					70	(70)					
198	G5					114	(114)					
199	G6					54	(54)					
200	G7					48	(48)					
201	G8					64	(64)					

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-035

Name and Address: Theodore Chamberlain 400 Gray Blvd.

[illegible]



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-152-112-014

Name and Address: Hartsel & Henderson 431 Gray Blvd

	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
52	A1					225						
53	A2					89						
54	A3					140						
55	A5					154						
56	B1					230						
57	B2					79						
58	B5					197						
59	C1					341						
60	C2					233						
61	C5					180						
62	D1					177						
63	D2					269						
64	D5					208						
65	E1					191						
66	E2					197						
67	E3					87						
68	E4					68						
69	E5					79						

<u>KRF</u>	<u>ID</u>	<u>Pl</u>
70	F1	330
71	F2	99
72	F3	158
73	F4	240
74	F5	238
75	G1	212
76	G2	105
77	G5	149

Environmental Consulting & Contracting

Waste Management
24-hour Service
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Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

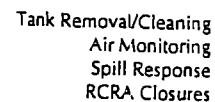
Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160 **LPC#:** 1630455241

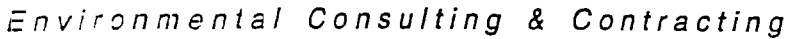
Parcel Number: 02-19.0-112-013

Name and Address: Dorothy Thomas 425 Gray Blvd

[illegible]



Bodine Environmental Services, Inc. Job Number # 112025



Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

LPC#: 1630455241

Name and Address: Marry Babbit 538 Gray Blvd

[illegible]



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-029

Name and Address: ST. CLAIR CO. TRUSTEE-540 GRAY BLVD.

adding #	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
37	A2					210						
38	A3					113						
39	A4					90.5						
40	B2					BDL						
41	MAN B3					BDL						
42	B4					BDL						
43	C2					114						
44	C3					BDL						
45	C4					BDL						
46	D2					43.6						
47	D3					BDL						
48	D4					BDL						
49	E2					46.4						
50	E3					BDL						
51	E4					BDL						
52	F2					48.1						
53	F3					180						
54	F4					131						
55	G2					146						

Environmental Consulting & Contracting

**Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures**

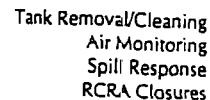
Job Description: East Saint Louis Awning Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-029

Name and Address: ST. CLAIR CO. TRUSTEE - 540 GARY BLVD.

[illegible]



BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-419-071

Name and Address: Sharon Howard 549 Gray Blvd

RF	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
39	A1					117.8						
40	A2					156.4						
41	A3					235						
42	A6					143.9						
43	A7					129.4						
44	B					180.9						
45	B 3					66.5						
46	B 6					82.2						
47	B 7					120.8						
48	C1					117.5						
49	C2					143.8						
50	D1					117.5						
51	D2					117.5						
52	E3					210.0						
53	F3					143.8						
54	F5					106.6						
55	F7					87.9						
56	G3					121.3						
57	G5					99.3						
58	G7					106.4						

Name and Address: McHENRY, JERRY - 553 GRAY BLD.

[illegible]



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-419-066

Name and Address: Catherine Brown 559 Gray Blvd.

Reading #	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
239	A1					125						
240	A2					300						
241	A3					301						
242	A4					268						
243	B2 B1					169						
245	B3					340						
246	B4					226						
247	C1					242						
248	D1					308						
249	E1					257						
250	E3					72.4						
251	F1					119						
252	F3					98.1						
244	B2					116						
253	G1					249						
254	G2					113						

**Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures**

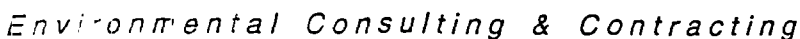
Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-018

Name and Address: WITHERSPOON, JAMES - 568 GRAY BLVD.

[illegible]



**Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures**

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Name and Address: OTis Walker 541/543 Gray Blvd.

Bodine Environmental Services, Inc. Job Number # 112025



Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning Site #160

LPC#: 1630455241

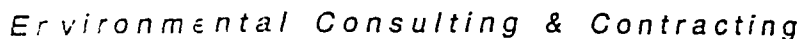
Parcel Number:

02-19,0-204-036

Name and Address:

UNK

Bodine Environmental Services, Inc. Job Number # 112025



Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Name and Address: East St. Louis, Mo. Gray Blvd

[illegible]

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263



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-031

Name and Address: Winged Hagan 402 Gray Blvd

XRF	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
215	A2					114						
216	A3					89						
217	A4					61						
218	A5					96						
219	A6					88						
220	A7					88						
221	B2					76						
222	B3					439						
223	B4					53						
224	B5					41						
225	B6					67						
226	B7					91						
227	E1					52						
228	1-2					491						
229	1-3					437						
230	1-4					43						
231	1-5					434						
232	1-6					434						
233	E7					119						

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224

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number:

02-19.0 -204-031

Name and Address:

Hogan, W. Fred - 402 Gray Blvd

Location ID	Time	Fe ID	Mn	Zn Pb	Pb	Cu	As	Sr	Rb	Zr	Mo
235		F1		66							
236		F2		439							
237		F3		455							
238		F4		449							
239		F5		61							
240		F6		50							
241		F7		62							
242		G1		56							
243		12		82							
244		3		58							
245		4		68							
246		5		64							
247		66		66							
248		G7		153							
249		H1		129							
250		H2		96							
251		H3		107							
252		H4		97							
253		H5		111							

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249
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250

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257
+
258

Bodine Environmental Services, Inc. Job Number # 112025

H6 127
H7 562

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

1/3

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-009

Name and Address: Edgemont Development 416 Gray Blvd

IRF	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
104	A1					41						
105	A2					129						
106	A3					112						
107	A4					134						
108	A5					113						
109	A6					106						
110	A7					125						
111	A8					79						
112	A10					94						
113	A11					104						
114	A13					155						
115	B1					60						
116	B2					137						
117	B3					98						
118	B4					102						
119	B5					113						
120	B6					123						
121	B7					75						
122	B8					74						

2/3

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-2004-009

Name and Address: Edgemont Dr. 416 Gray

	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
123	B10					48						
124	B11					47						
125	B13					52						
126	C1					214						
127	E2					310	340					
128	E4					342	342					
129	E6					430	430					
130	F10					440	440					
131	F12					440	440					
132	F14					315	315					
133	F8					304	304					
134	F10					184	184					
135	F12					263	263					
136	F14					51	51					
137	G2					265	265					
138	G4					348	348					
139	G8					549	549					
140	G10					195	195					
141	G12					39	39					

Environmental Consulting & Contracting

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

25/3

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-009

Name and Address: Edgemount Develop. Aile Gray

Bodine Environmental Services, Inc. Job Number # 112025



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

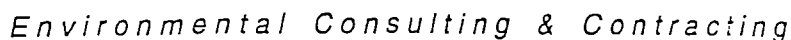
Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-112-021

Name and Address: Vincent Harvey 419 Gray Blvd

	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
538	A1					124						
539	A2					95						
540	A3					54						
541	A4					119						
542	B1					109						
543	C2					551						
544	D2					459						
545	E2					109						
546	E3					302						
547	E4					189						
548	F1					315						
549	F2					224						
550	F3					89						
551	F4					156						
552	F5					195						
553	G1					447						
554	G2					229						
555	G3					146						
556	G4					217						
557	G5					325						



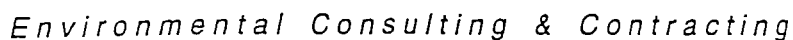
- Tank Removal/Cleaning
- Air Monitoring
- Spill Response
- RCRA Closures

Job Description: East Saint Louis Awning Site #160

LPC#: 1630455241

Name and Address: Arlos McFarland 424 Gray Blvd

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13



- Tank Removal/Cleaning
- Air Monitoring
- Spill Response
- RCRA Closures

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Name and Address: Greta Stinson 426 Gray Blvd

[illegible]

Discrep
45



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-204-003

Name and Address: James Perry 428 Gray Blvd

XRF	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
20	A1					140						
21	A2					120						
22	A3					91						
23	B1					66						
24	B2					80						
25	B3					58						
26	E3					427						
27	F3					60						
28	F4					260						
29	G1					113						
30	G2					127						
31	G3					132						
32	G4					61						
33	H1					154						
34	H2					172						
35	H3					153						
36	H4					135						



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

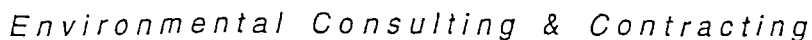
LPC#: 1630455241

Parcel Number: 02-19-0-204-036

Name and Address: UKN

Gray Blvd.

XRF	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
78	A1					157						
79	A2					126						
80	A3					145						
81	A4					169						
82	A5					123						
83	A6					172						
84	A7					197						
85	A10					163						
86	B1					78						
87	B2					160						
88	B3					438						
89	B9					86						
90	B10					90						
91	B11					217						
92	C1					258						
93	C2					354						
94	C9					123						
95	C10					120						
96	C11					230						



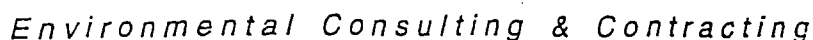
- Tank Removal/Cleaning
- Air Monitoring
- Spill Response
- RCRA Closures

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Name and Address: McVay Willie & Da - 501 Gray Blvd.

[illegible]



Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

6-3-02

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-419-094

Name and Address: LV THOMAS + JIM HAYE - 505 GRAY BLVD.

[illegible]



Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-419-092

Name and Address: CHAPMAN, ROBERT - 509 GRAY BLVD.

[illegible]

Bodine Environmental Services, Inc. Job Number # 112025



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-020

Name and Address: FARRIS EXCEL - 560 GRAY BLVD.

Job #	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
21	A2					119						
22	A4					47						
23	A5					558						
24	B2					146						
25	B4					47.2						
26	B5					56.1						
27	E2					287						
28	E3					457						
29	F2					150						
30	F3					163						
31	G2					290						
32	G3					219						
33	G4					173						
34	H3					325						
35	H4					254						
36	H5					124						

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-016

Name and Address: SANDERS, JESSIE - 574 GRAY BLVD.

AWNING #	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
181	A1					201						
182	A2					164						
184	A4					206						
185	B2					174						
186	B4					144						
187	E1					134						
188	E2					215						
189	E3					439						
191	E4					359						
192	F2					151						
193	F4					218						
194	G2					330						
195	G4					253						
	E2	60 sec										
190	E3	60 sec				361						

Bodine Environmental Services, Inc. Job Number # 112025

193 during next remediation - ref under construction here



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

1/2

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-417-055

Name and Address: Starlette Mitchell, 507 Gray Blvd

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
213 A1					218						
214 A3					107						
215 A5					203						
216 A7					370						
217 B1					120						
218 B3					69.1						
219 B5					732						
220 B7					370						
221 C1					195						
222 C3					BDL						
223 C5					74.9						
224 C7					174						
225 D1					179	204					
226 D3					204	65.5					
227 D5					153						
228 D7					285						
229 E1					188						
230 E3					78.7						
231 E5					77.6						

Environmental Consulting & Contracting

**Waste Management
24-hour Service
Site Remediation
Environmental Audits**

**Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures**

272

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-419-055

Name and Address: Starrett Mitchell, 587 Gray Blvd.

Location

Id

[illegible]

Job Description: East Saint Louis Awning Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-419-057

Name and Address: T-jay Inc. 583 Gray Blvd.

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Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-419-056

Name and Address: Orgy Moore 585 Gray Blvd.

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
129 A1					113.8						
130 A2					184.2						
131 A3					130.6						
132 A4					142.9						
133 B1					195						
134 B2					381.8						
135 C1					436.8						
136 D1					585.2						
137 E1					289						
138 E3					350.2						
139 E5					213.4						
140 F1					158.5						
141 F3					295.2						
142 F5					232.8						
143 G1					230.2						
144 G3					174						
145 G5					278.8						

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: ~~02-18-E-470-025~~ 02-19-B-112-025

Name and Address: ~~W. R. B. MAURY - 550 Gray Blvd.~~
Melvin Goodwin 411 Gray Blvd.

Location ID	Time Grnd	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
467	A1				146						
468	A2				195						
469	A3				223						
470	A4				242						
471	A5				174						
472	A6				148						
473	A7				166						
474	A-8				188						
475	A9				154						
476	A10				219						
477	A-11				163						
478	A12				195						
479	A14				184						
480	A15				170						
481	A17				118						
482	A18				169						

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-112-005

Name and Address: Melvin Goodwin 411 Gray Blvd

XRF

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
483 B-1					163						
484 B-2					137						
485 B-3					90						
486 B-4					65						
487 B-5					92						
488 B-6					154						
489 B-7					129						
490 B-8					168						
491 B-9					120						
492 B-10					237						
493 B-11					138						
494 B-12					111						
495 B-14					147						
496 B-15					147						
497 B-17					174						
498 B-18					975						
499 C-1					153						
500 C-2					99						
501 C-3					186						
502 C-4					176						

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0 -112-025

Name and Address: Melvin Goodwin

Location ID	Time	Fe	Mn	Zn Pb	Pb	Cu	As	Sr	Rb	Zr	Mo
503	D1	D1		164							
504	D2	D2		204							
505	D3	D3		1229							
506	E1	E1		122							
507	E2	E2		130							
508	E3	E3		242							
509	E18	E18		564							
510	F3	F3		213							
511	F18	F18		544							
512	G3	G3		293							
513	I4	I4		157							
514	I5	I5		334							
515	I6	I6		370							
516	I7	I7		370							
517	I8	I8		574							
518	I9	I9		224							
519	I10	I10		246							
520	I11	I11		600							
521	I12	I12		244							
522	I13	I13		234							
523	G14	G14		75							

Bodine Environmental Services, Inc. Job Number # 112025

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-19.0-112-022

Name and Address: Booker Blackwell 415 Gray Blvd

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
524 A1					125						
525 A2					88						
526 A3					176						
527 A4					235						
528 B2					99						
529 B4					171						
530 E1					427						
531 E2					215						
532 E3					151						
533 E4					155						
534 F1					528						
535 F2					374						
536 F3					261						
537 G2					110						



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-044

Name and Address: ST. CLAIR C. TRUSTEE - 508 GRAY BLVD.

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
A1					108						
A2					180						
A4					186						
A5					131						
B1					293						
B2					100						
B4					1500						
B5					230						
C2					230						
D5					240						
E5					246						
F1					341						
F2					82						
F4					233						
F5					151						
G2					104						
G3					182						
G4					111						
G5					270						

Bodine Environmental Services, Inc. Job Number # 112025



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

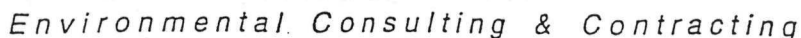
Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160 LPC#: 1630455241

Parcel Number: 0-2-18,0-419-091

Name and Address: Riverfront Corp. 513 Gray Blvd

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
A1					209.8						
A2					221						
A3					176.8						
A4					273.2						
A5					357.2						
B1					244.4						
B2					1169.6						
B3					292.8						
B5					502.8						
C1					1000						
D1					1529.6						
E1					692.8						
F3					320						
F4					1529.6						
F5					1009.6						
G2					1668.8						



Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-419-089

Name and Address: Lorene & Hat Gresham 515 Gray Blvd.

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Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-419-079

Name and Address: Greg & NaLVina Harlan 535 Gray Blvd

	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
146	A1					176.9						
147	A2					126						
148	A3					186.3						
149	A4					275						
150	B1					285.6						
151	C1					247.6						
152	D1					800						
153	E1					576.4						
154	E3					330.4						
155	E5					102.6						
156	F1					51						
157	F5					96.9						
158	G1					<LOD						
159	G3					<LOD						
160	G5					100.5						



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18,0-420-033

Name and Address: REEVES, ALBERT L. - 530 GRAY BLVD.

RF	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
302	A2					160						
303	A4					166						
304	B2					170						
306	B4					421						
07	C1					549						
309	D1					714						
310	E1					219						
311	E3					106						
312	E4					162						
313	F1					201						
314	F3					169						
315	F4					207						
316	G2					169						
317	G3					191						
318	G4					120						
319	H1					268						
320	H2					244						
21	H3					100						
322	H4					95						

disregard
305
308

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-032

Name and Address: JOHNSON, CURTIS - 536 GRAY BLVD.

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
323 A1					174						
324 A2					112						
325 A3					178						
326 B1					145						
327 B2					88						
328 B3					337						
329 C1					1290						
330 D1					1810						
331 F1					95						
332 F2					291						
333 F3					566						
334 F4					729						
335 G1					231						
336 G2					106						
337 G3					494						
338 G4					457						
339 H1					366						
340 H2					450						
341 H3					156						
342 H4					807						



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-026

Name and Address: ROGERS, JIMMIE - 548 GRAY BLVD.

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
A2					127						
A4											
B2					209						
B3					140						
B4					68.5						
C4					698						
E1					474						
E2					280						
E3					373						
E4					277						
F1					52.3						
F2					74.2						
F3					90.4						
F4					79.4						
G1					43.4						
G2					51.5						
G3					59.2						
G4					62.4						
H1					61.1						

Bodine Environmental Services, Inc. Job Number # 112025

176 Battery ran out

BODINE

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

**Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures**

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

LA 4770 Parcel Number: 02-18.0-420-026

Name and Address: ROGERS, JIMMIE - 548 GRAY BLVD

[illegible]



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-024

Name and Address: WTRR, MAURY - 550 Gray Blvd.

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
81 A2					120						
82 A3					167						
83 B2					73.8						
34 B3					200						
85 B4					141						
86 E2					302						
87 E3					191						
88 E4					186						
89 F1					114						
90 F2					1040						
91 F3					98.6						
92 F4					70.1						
93 G1					65.3						
94 G2					46.4						
95 G3					179						
96 H1					96.1						

BODINE ENVIRONMENTAL SERVICES, INC.

Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-C23

Name and Address: BELL, EURETHA COLE - 552 GRAY BLVD.

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
A1					169						
A2					207						
A4					222						
A5					138						
B1					953						
B2					98.8						
B4					103						
B5					92						
C1					530						
E5					159						
D1					762						
D5					239						
E5					328						
F2					304						
F5					290						
G2					169						
H2					149						

Environmental Consulting & Contracting

- Tank Removal/Cleaning
- Air Monitoring
- Spill Response
- RCRA Closures

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Name and Address: OZella Coleman 3556 Gray Blvd

[illegible]



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-018

Name and Address: WETHERSPOON, JAMES - 568 GRAY BIRD.

	Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
97	A1					155						
98	A2					95.8						
99	A3					129						
100	A4					127						
101	A6					149						
102	B1					187						
103	B2					159						
104	B6					204						
105	C1					490						
106	E6					410						
107	E6	60 sec				420						
108	D1					686						
109	D6					475						
110	E1					225						
111	E2					150						
112	E3					294						
114	H3 E4					252						
114	E5					329						
116	H5 E6					426						

Bodine Environmental Services, Inc. Job Number # 112025

113 CANCELLED - BAD XRF PLACEMENT



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18-C-420-017

Name and Address: IBBS, STEPHANIE - 572 Gray Blvd.

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
65 A1					102						
66 A2					121						
67 A3					132						
68 A4					154						
69 B1					137						
70 B2					193						
71 B3					431						
72 B4					624						
73 C1					341						
74 D1					437						
75 E1					188						
76 E2					175						
77 E5					166						
80 78 F2					218						
78 G1					248						
79 G2					254						



Environmental Consulting & Contracting

Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Client: Illinois Environmental Protection Agency

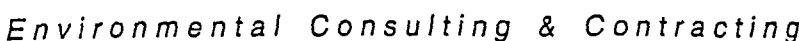
Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-014

Name and Address: HAYES, BERRY - 578 GRAY BLVD.

Location ID	Time	Fe	Mn	Zn	Pb	Cu	As	Sr	Rb	Zr	Mo
140 A2					110						
141 A3					172						
142 A4					96						
143 B2					159						
144 B3					330						
145 B4					228						
146 C1					808						
147 D1					474						
148 E1					373						
149 E2					404						
150 E4					346						
151 F1					260						
152 F2					295						
153 F3					168						
154 F4					168						
155 G2					115						
156 G3					190						
157 G4					176						



Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-013

Name and Address: DAVIS, Duane + Leo - 580 62nd BVD.

Bodine Environmental Services, Inc. Job Number # 112025

Environmental Consulting & Contracting

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Name and Address: Laverta Campbell 581 Gray

[illegible]



Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18.0-420-011

Name and Address: LUCAS, GERALDINE A. - 584 GRAY BLVD.

[illegible]



Waste Management
24-hour Service
Site Remediation
Environmental Audits

Tank Removal/Cleaning
Air Monitoring
Spill Response
RCRA Closures

6/9/02

Job Description: East Saint Louis Awning, Site #160

LPC#: 1630455241

Parcel Number: 02-18,0-420-009

Name and Address: AUSTELL, LARRY C. - 586 GRAY BLVD.

[illegible]

Appendix I

Property Access Surveys



Client: Illinois Environmental Protection Agency

Job Description: East Saint Louis Awning Site #160

LPC#: 1630455241

Bodine Environmental Services, Inc. Job Number # 112025

Assessor #	Name	Address	Date	Notes
02-18.0-419-055	Mitchell, Starrette	587 Gray Blvd		Not a House
02-18.0-419-056	Moore, Orgy L	585 Gray Blvd	YES	
02-18.0-419-057	Tujay, Inc.	583 Gray Blvd	YES	
02-18.0-419-058	Campbell, Laverta	581 Gray Blvd	NH	
02-18.0-419-060	Thomas, Carrie	577 Gray Blvd	NH	
02-18.0-419-061	Washington, Teretha	575 Gray Blvd	NH	
02-18.0-419-062	Johnson, Lester	571 Gray Blvd	NH	
02-18.0-419-063	Yates, Arlene	565 Gray Blvd	NH	
02-18.0-419-064	Malone, Marva	561 Gray Blvd	NH	
02-18.0-419-065				
02-18.0-419-066	Brown, Catherine	559 Gray Blvd		
02-18.0-419-068	Coleman, Ozella	555 Gray Blvd		
02-18.0-419-071	Howard, Sharron	549 Gray Blvd	YES	
02-18.0-419-072	Claireborne, John	547 Gray Blvd		
02-18.0-419-073	Hudson, Yvonne et al	545 Gray Blvd		
02-18.0-419-074	Estate of Joseph Wat	545 Gray Blvd		
02-18.0-419-075	Walker, Otis	541 Gray Blvd	NH	543 adjacent white building NH
02-18.0-419-079	Harlan, Nalvina & Greg	535 Gray Blvd	YES	
02-18.0-419-081	Hameed Askia & Pamela	533 Gray Blvd	NH	533 1/2
02-18.0-419-082	Portgee, Armittee & Al	531 Gray Blvd	NH	
02-18.0-419-085	Hughes, Sheketia	523 Gray Blvd	NH	
02-18.0-419-086	Harmon, Sherman & Lou	519 Gray Blvd	NH	
02-18.0-419-087	Harmon, Sherman & Lou	519 Gray Blvd		
02-18.0-419-089	Gresham, Lorene & Hat	515 Gray Blvd	NH	
02-18.0-419-091	Riverfront Corp.	513 Gray Blvd	YES	

Residence left of 586 NH 588

02-18.0-419-092	Chapman, Robert	509 Gray Blvd	YES	
02-18.0-419-094	Lv Thomas & Jim Haye	505 Gray Blvd	NH	
02-18.0-419-096	McVay, Willie & Da	501 Gray Blvd	✓ YES	
02-18.0-419-100	McHenry, Jerry	553 Gray Blvd	YES	
02-18.0-419-103	Brewer, Spencer L. Sr.	527 Gray Blvd	YES	
02-18.0-420-009	Austell, Larry C	586 Gray Blvd	YES	
02-18.0-420-011	Lucas, Geraldine A.	584 Gray Blvd	✓	Abandoned
02-18.0-420-013	Davis, Dupree & Cleo	580 Gray Blvd	YES	
02-18.0-420-014	Hayes, Bobby	578 Gray Blvd	YES	MARY (husband)
02-18.0-420-016	Sanders, Jessie	574 Gray Blvd		Abandoned
02-18.0-420-017	Tibbs, Stephanie	572 Gray Blvd	Prescribed	Appd to CALL her ^{SECRET} work on
02-18.0-420-018	Witherspoon, James	568 Gray Blvd	YES	
02-18.0-420-019	Smith, Janina	564 Gray Blvd		
02-18.0-420-020	Farriss Excell	560 Gray Blvd		
02-18.0-420-021	Townsend, Richard Q.	556 Gray Blvd		
02-18.0-420-022	Smith, Gloria etal	554 Gray Blvd		
02-18.0-420-023	Bell, Euretha Cole	552 Gray Blvd		
02-18.0-420-024	Warr, Maury	550 Gray Blvd		
02-18.0-420-025	Warr, Maury	550 Gray Blvd		
02-18.0-420-026	Rogers, Jimmie	548 Gray Blvd		
02-18.0-420-028	Wilson, John W. etal	546 Gray Blvd		
02-18.0-420-029	St. Clair Co. Trustee	540 Gray Blvd		
02-18.0-420-032	Johnson, Curtis	536 Gray Blvd	YES	
02-18.0-420-033	Reeves, Albert L.	530 Gray Blvd		
02-18.0-420-035	Stalling, Hattie	528 Gray Blvd		
02-18.0-420-036	Fulton, Carolyn & Gil	526 Gray Blvd		
02-18.0-420-044	St. Clair Co. Trustee	508 Gray Blvd		
02-18.0-420-045	Corley, Tiffany	506 Gray Blvd		
02-18.0-420-047	Blackwell, Booker T. J.	504 Gray Blvd	yes	

02-18.0-420-048		Gray Blvd		
02-18.0-420-088	Falon LTD	516 Gray Blvd		Abandoned
02-18.0-420-090	Chandler, Terez & Nie	588 Gray Blvd	NH	
02-18.0-420-093	Bobbit, Mary	538 Gray Blvd		
02-19.0-112-013	Guddis, Warren	433 Gray Blvd	Yes	
02-19.0-112-014	Herndon, Hartensel &	431 Gray Blvd		
02-19.0-112-016	Nicholson, John &	429 Gray Blvd		
02-19.0-112-017				
02-19.0-112-018	Thomas, Dorothy J	425 Gray Blvd		
02-19.0-112-021	Harvey, Vincent L & B	419 Gray Blvd	NH	
02-19.0-112-022	Blackwell, Booker T & J	415 Gray Blvd	Yes	
02-19.0-112-025	Goodwin, Melvin & Ara	411 Gray Blvd	Yes	405, 407, 409, 411
02-19.0-112-028	Prossie, Senunie Pirtle	421 Gray Blvd	Yes	
02-19.0-204-003	Perry, James	428 Gray Blvd	Yes	
02-19.0-204-004	Stinson, Greta	426 Gray Blvd	Yes	
02-19.0-204-005	Stinson, Greta	426 Gray Blvd	Yes	
02-19.0-204-009	Edgemont Development	416 Gray Blvd	✓	Abandoned
02-19.0-204-011	Hogan, Winifred	402 Gray Blvd	✓	
02-19.0-204-031	Hogan, Winifred	402 Gray Blvd	Yes	
02-19.0-204-034	McFarland, Amos	424 Gray Blvd	Not Home	
02-19.0-204-035	Chamberlain, Theodore	400 Gray Blvd	Yes	
02-19.0-204-036		Gray Blvd		

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): Theodore Chamblain

Address: 400 Gray Blvd., East St. Louis, IL

Phone Number: 618 875-0643 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? X Yes No
If no, why did they refuse? _____

Consent to sample property? X Yes No
If no, why did they refuse? _____

Resident Information

Number of residents: 1
Number of Children: 0 If so, ages _____
Recent fill: no
Garden: no

Explain: _____

Additional Comments

Hasn't heard from sampling last
year. Please send a copy of the results
and explanation of results

810 Explain results very well before
agree to soil removal documents that it
does

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): W. ~~W~~ Fred Hogen
Address: 402 Gray Blvd
Phone Number: 271-1631 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? X Yes No
If no, why did they refuse? _____
Consent to sample property? X Yes No
If no, why did they refuse? _____

Resident Information

Number of residents: 5
Number of Children: 2 full-time If so, ages 1-18
Recent fill: no and grant kids on a regular basis
Garden: no

Explain: _____

Additional Comments

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): Melvin Goodwin

Address: 405^{407 409} - 411 Gray Apt

Phone Number: _____ (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 14
Number of Children: _____ If so, ages _____
Recent fill: _____
Garden: _____

Explain: _____

Additional Comments

Mailing 620 N. 22nd St.
East St. Louis 62205

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident LocationName(s): MR. BECKER T. BLACKWELL, SR.Address: 415 GRAY BLVD.Phone Number: 618 / 271-1925 (Daytime)
618 / 271-1925 (Evening)**Access Information**Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____**Resident Information**Number of residents: 3
Number of Children: 1 If so, ages 19 yrs.
Recent fill: _____
Garden: _____Explain: _____
_____**Additional Comments**6 Thom
Jr. College

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): Vincent Harvey

Address: 419 Gray Blvd

Phone Number: (217) 274-5219 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? X Yes No
If no, why did they refuse? _____

Consent to sample property? X Yes No
If no, why did they refuse? _____

Resident Information

Number of residents: 7
Number of Children: 2 If so, ages 6mo, 3yr.
Recent fill: no
Garden: no

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): LETARIONNE WILSON

Address: 420 GRAY AV

Phone Number: 618 - 271-1237 (Daytime)

(Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 6

Number of Children: 2

If so, ages 3, 2

Recent fill: _____

Garden: _____

Explain: _____

Additional Comments

I like this

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): Eeandle Thomas

Address: 425 Gray

Phone Number: 271-0350 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? X Yes No
If no, why did they refuse? _____

Consent to sample property? X Yes No
If no, why did they refuse? _____

Resident Information

Number of residents: 7
Number of Children: 2 If so, ages 4 and 10 mo.
Recent fill: just around bush
Garden: no

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Greta STINSON

Address: 426 Gray

Phone Number: 271/5064 (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 2

Number of Children: _____ If so, ages _____

Recent fill: _____

Garden: _____

Explain: _____

Additional Comments

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): James Perry

Address: 428 Grady

Phone Number: 874 -3805 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? ✓ Yes No
If no, why did they refuse? _____

Consent to sample property? ✓ Yes No
If no, why did they refuse? _____

Resident Information

Number of residents: 4
Number of Children: 2 If so, ages 2, 8
Recent fill: _____
Garden: _____

Explain: _____

Additional Comments

✓ Chris DICKSON - Blood Lead Screening
_____ Referral to Karla Ann
_____ St. Mary's

For Office Use Only ID # _____

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Jordan Mrs. Jordan

Address: 432

Phone Number: _____ (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 2
Number of Children: 0 If so, ages _____
Recent fill: _____
Garden: N/D

Explain: _____

Additional Comments

March 2002

For Office Use Only ID # _____

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): Leora Dawkins

Address: 501 Gray

Phone Number: 271-4661 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 1

Number of Children: _____ If so, ages _____

Recent fill: _____

Garden: _____

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Betty T. Blackwell Jr.

Address: 504 Gray Blvd.

Phone Number: (618) 271-2067 (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ☒ Yes No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes No
If no, why did they refuse? _____

Resident Information

Number of residents: 7

Number of Children: 2

Recent fill: _____

Garden: _____

If so, ages 5, + 13

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident LocationName(s) Baker, F. Lee, Jr.Address: 504 Gray Fldg., E. St. LouisPhone Number: _____ (Daytime)
_____ (Evening)**Access Information**Consent to XRF property? X Yes No
If no, why did they refuse? _____Consent to sample property? X Yes No
If no, why did they refuse? _____**Resident Information**Number of residents: 7Number of Children: 4Recent fill: noGarden: noIf so, ages <1, <1, 2, 2
newborn twins, toddler twinsExplain: _____
_____**Additional Comments**Gave permission last year

For Office Use Only ID # _____

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): Robert Chapman

Address: 509 Gray Blvd

Phone Number: 874-5355 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? ✓ Yes No
If no, why did they refuse? _____

Consent to sample property? ✓ Yes No
If no, why did they refuse? _____

Resident Information

Number of residents: 2
Number of Children: _____ If so, ages _____
Recent ill: No
Garden: _____

Explain: _____

Additional Comments

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): Gregory Monigan

Address: 513 Gray Blvd

Phone Number: _____ (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 4
Number of Children: 2 If so, ages 12 & 6
Recent fill: _____
Garden: _____

Explain: _____

Additional Comments

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): Ms. Foster

Address: 515 Gray Blvd

Phone Number: 618/394-8557 (Daytime)
 _____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
 If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
 If no, why did they refuse? _____

Resident Information

Number of residents: 4

Number of Children: 2 If so, ages 6-4

Recent fill: _____

Garder.: _____

Explain: _____

Additional Comments

she thinks the kids have been screened,

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): Spencer Brewster

Address: 527 Gray Blvd

Phone Number: 875-0915 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? ✓ Yes No
If no, why did they refuse? _____

Consent to sample property? ✓ Yes No
If no, why did they refuse? _____

Resident Information

Number of residents: 1
Number of Children: _____ If so, ages _____
Recent fill: _____
Garden: _____

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Nalvina
~~Alena~~ Harlen

Address 535 Gray

Phone Number: 271-0491 (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ✓ Yes _____ No
If no, why did they refuse? _____

Consent to sample property? ✓ Yes _____ No
If no, why did they refuse? _____

Resident Information

Number of residents: 2

Number of Children: _____

Recent fill: _____

Garden: _____

If so, ages _____

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Curtis Johnson

Address: 536 Gray Blvd, E. St. Louis

Phone Number: _____ (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ☒ Yes No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes No
If no, why did they refuse? _____

Resident Information

Number of residents: 4
Number of Children: 0 If so, ages _____
Recent fill: no
Garden: no

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Mamie Smith

Address: 541 - 54B

Phone Number: 271 / 5232 (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 1

Number of Children: _____ If so, ages _____

Recent fill: _____

Garden: _____

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Undra Howard Yacht Ho

Address: 549 Gray

Phone Number: _____ (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 4

Number of Children: 2

Recent ill:

Garden: yes

If so, ages 6 7 9

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s):

Mary Warr

Address

550

Phone Number:

271-7122

(Daytime)

(Evening)

Access Information

Consent to XRF property?

☒ Yes

☐ No

If no, why did they refuse?

Consent to sample property?

☒ Yes

☐ No

If no, why did they refuse?

Resident Information

Number of residents:

2

Number of Children:

If so, ages

Recent fill:

Garden:

Explain:

Additional Comments

2 B.g Rot ceiling

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Jerry M^c Henry

Address: 553 Gray Blvd.

Phone Number: 618-274-4184 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: _____
Number of Children: _____ If so, ages _____
Recent fill: _____
Garden: _____

Explain: N/A

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Barbara Brown

Address: 559 Gray

Phone Number: 394 - 0051 Sisters (Daytime)
House ✓ (Evening)

Access Information

Consent to XRF property? ✓ Yes No
If no, why did they refuse? _____

Consent to sample property? ✓ Yes No
If no, why did they refuse? _____

Resident Information

Number of residents: 3

Number of Children: _____ If so, ages _____

Recent fill: _____

Garden: _____

Explain: _____

Additional Comments

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): Dorothy White

Address: 565 Gray Blvd.

Phone Number: _____ (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? X Yes _____ No
If no, why did they refuse? _____

Consent to sample property? X Yes _____ No
If no, why did they refuse? _____

Resident Information

Number of residents: 1
Number of Children: 0 If so, ages _____
Recent fill: no
Garden: no

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s):

Stephanie Tibbs

Address:

572 Gray

Phone Number:

874 - 4730

(Daytime)

(Evening)

Access Information

Consent to XRF property?

If no, why did they refuse?

Called back

____ Yes

____ No

N/A

Consent to sample property?

If no, why did they refuse?

____ Yes

____ No

*NR***Resident Information**

Number of residents:

5

Number of Children:

If so, ages

18, 15, 12

Recent fill:

Garden:

Explain:

Additional Comments*Spoke to her son*

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Mary Hughes

Address: 578 GRAY

Phone Number: 271-1284 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 2

Number of Children: _____ If so, ages 2

Recent fill: _____

Garden: _____

Explain: _____

Additional Comments

CALL ABOUT GARDEN

REFERRED HER TO

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): Norma Monigan

Address: 580 Gray Blvd

Phone Number: 874 2728 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 4

Number of Children: 3 If so, ages 5, 4, 3

Recent fill: _____

Garden: _____

Explain: Blood Levels Screened Normal

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s):

Allen Priscilla Allen

Address:

583 Gray

Phone Number:

(Daytime)

(Evening)

Access Information

Consent to XRF property?

☒ Yes

☐ No

If no, why did they refuse? _____

Consent to sample property?

☒ Yes

☐ No

If no, why did they refuse? _____

Resident Information

Number of residents:

2

Number of Children:

1

If so, ages _____

Recent fill:

Garden:

NO

Explain: _____

Additional Comments

need lead analysis in home

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): ORGY L. MOORE

Address: 585 GRAY Blvd / E. St. Louis, Ill. 62205

Phone Number: 618-874-3715 (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 1
Number of Children: _____ If so, ages _____
Recent fill: _____
Garden: _____

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Sam & Lucy Austell

Address: 586 Gray

Phone Number: 271-0745 (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 2

Number of Children: _____ If so, ages _____

Recent fill: _____

Garden: _____

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Kevin B Ball

Address: 581 Gray Blvd

Phone Number: 618-274 3979 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 2

Number of Children: 0 If so, ages _____

Recent fill: N

Garden: Y

Explain: _____

Additional Comments

Call with results, but may need send letter

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Jerry McHenry

Address: 553 Gray

Phone Number: 618 274-4184 (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? X Yes No
If no, why did they refuse? _____

Consent to sample property? X Yes No
If no, why did they refuse? _____

Resident Information

Number of residents: 1
Number of Children: 9 If so, ages _____
Recent fill: N
Garden: N

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Shaundelle Hei Delberg

Address: 505 Gray

Phone Number: _____ (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 8
Number of Children: 6 If so, ages 16-10
Recent fill: _____
Garden: _____

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Kevin Coleman

Address: 555 6 way

Phone Number: 271-6657 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 1

Number of Children: _____ If so, ages _____

Recent fill: _____

Garden: _____

Explain: _____

Additional Comments

She will leave the gate unlocked
wait back up when finished

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s):

Tisha Hartley

Address:

431 Gray

Phone Number:

271 - 7182

(Daytime)

Cell # 314/691 - 0011

(Evening)

Access Information

Consent to XRF property?

☒ Yes

☐ No

If no, why did they refuse?

Consent to sample property?

☒ Yes

☐ No

If no, why did they refuse?

Resident Information

Number of residents:

4

Number of Children:

If so, ages

17, 23

Recent fill:

Garden:

Explain:

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Jimie Rogers

Address: 548 GRAY

Phone Number: 274 - 7362 (Daytime)
_____ (Evening)

Access Information

Consent to XRF property? ✓ Yes _____ No
If no, why did they refuse? _____

Consent to sample property? ✓ Yes _____ No
If no, why did they refuse? _____

Resident Information

Number of residents: 5
Number of Children: 3 If so, ages 19, 13, 14
Recent fill: _____
Garden: _____

Explain: _____

Additional Comments

Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company

Resident Location

Name(s): Euretha Bell

Address: 552 Gray

Phone Number: 271 -1895 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 1

Number of Children: _____ If so, ages _____

Recent fill: _____

Garden: _____

Explain: _____

Additional Comments

**Property Access Survey
East St. Louis, Illinois
East St. Louis Awning Company**

Resident Location

Name(s): Excell Ferris

Address: 560 Gray

Phone Number: 271-7296 (Daytime)
____ (Evening)

Access Information

Consent to XRF property? ☒ Yes ☐ No
If no, why did they refuse? _____

Consent to sample property? ☒ Yes ☐ No
If no, why did they refuse? _____

Resident Information

Number of residents: 2

Number of Children: _____ If so, ages _____

Recent ill: _____

Garden: _____

Explain: _____

Additional Comments

20 SEP 1991:

5-22-02

Lurvaice McFarland, residing
at 424 Gray Blvd, E. St.
Louis, Ill. 62205 do agree
to have soil samples taken
from the Property listed above.

There are no children residing at
this Property.

Lurvaice McFarland
424 Gray Blvd
E. St. Louis, Ill 62205
618-271-9608